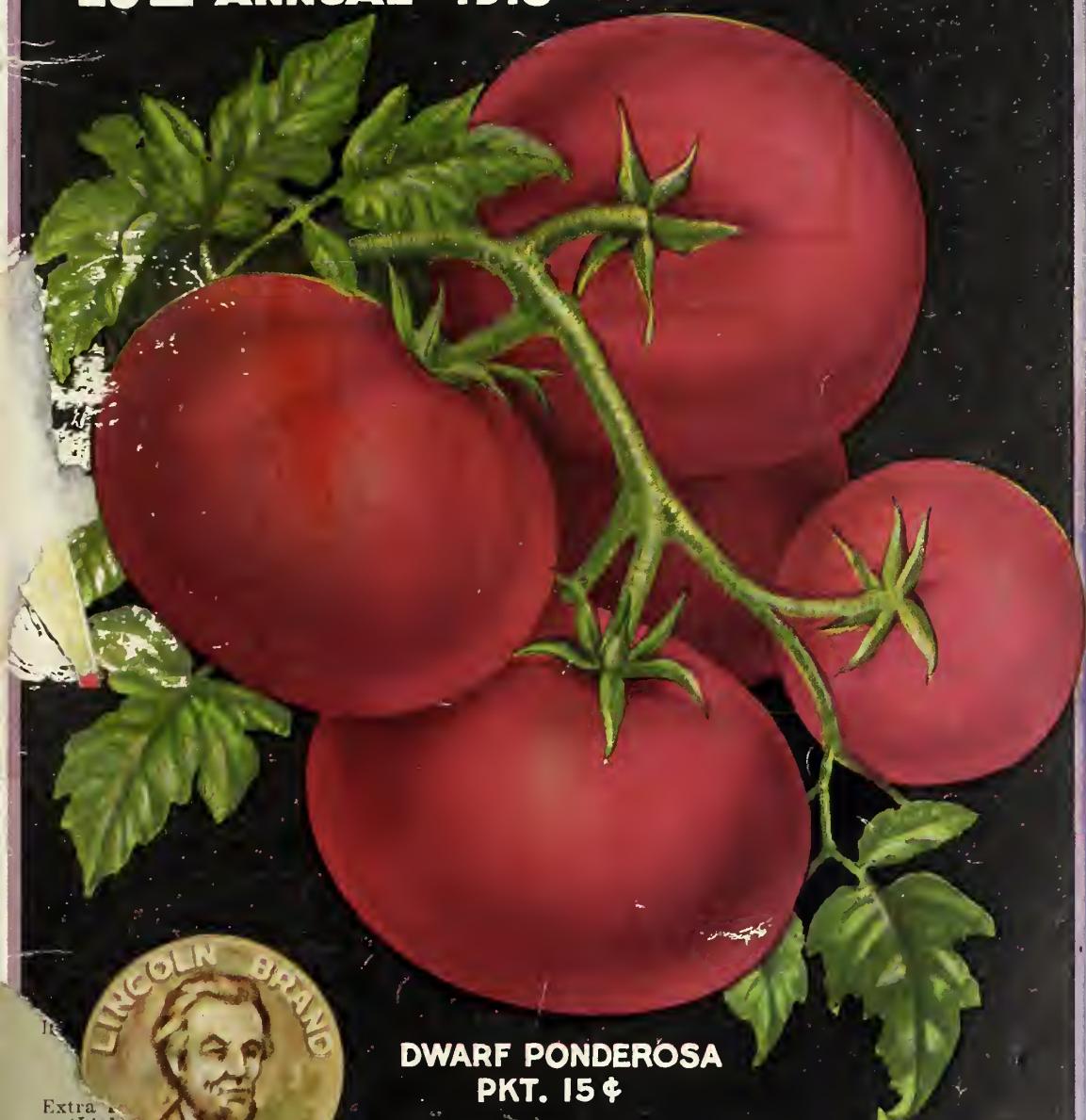


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

GRISWOLD SEED & NURSERY COMPANY

LINCOLN-NEBRASKA
28TH ANNUAL - 1918



DWARF PONDEROSA
PKT. 15¢

Extra Large
(Light) Early
Earliest Early
Largest of All
Early York...
Early Jersey W...
Early Winnings...
Early Spring...



SIMPLE RULES FOR ORDERING—BE SURE TO READ THIS PAGE

OUR CONSTANT AIM IS TO MAKE THE HIGHEST QUALITY THE FIRST CONSIDERATION, AND NEXT, TO PUT OUR PRICES AS LOW AS GOOD SEED CAN BE SOLD

Next in importance to supplying the best seeds is the prompt and accurate filling of orders. To that end we ask the co-operation of our patrons. It will hasten forwarding materially, if they will kindly make up orders alphabetically, as the goods are offered in the catalogue. This method is easier and is a safeguard against neglecting to order some item of importance. Seeds are put in compartments in our stores alphabetically, hence an order can be filled more quickly if it is made out in that manner.

CATALOGUE CHANGE.—We have made one important change, which we believe you will like. We quote all seeds by pound instead of pint, quart, peck and bushel.

TESTED SEEDS. For several years past we have tested all garden, field, and grass seed. We have a large tester, built according to the plans approved by the Government Department of Agriculture. The value of tested seeds to the buyer cannot be over-estimated. It is an assurance to you that the seed is full of vigorous life and vitality, and that if you plant under proper conditions and follow our instructions you will not be disappointed.

ERRORS. We exercise the utmost care in filling orders, striving to do a little more than we offer; yet in the press of business errors sometimes occur, in which event we wish to be promptly notified of the fact and will make such corrections as will be satisfactory. Errors made in printing are subject to correction. Please keep copies of all your orders for comparison.

OUR TERMS are cash with order. We cannot ship C. O. D. unless you remit at least one-fourth of the amount of the order. It always costs you extra for goods to come that way. We will take your personal check, but will hold order till banks report checks paid. Better send us Draft, Money Order, or Registered Letter. We always refund your money if we cannot fill order.

MARRIED WOMEN will save confusion in correspondence by always using husband's initials.

YOUR ORDER is acknowledged the day it is received, and filled just as soon as possible.

HOW WE SHIP. We ship all heavy goods by freight at your expense, unless otherwise instructed. We send you duplicate bill of lading, showing date, number of bags sent, and route. All plants and perishable goods are sent only by express at your expense, unless quoted "prepaid," in which case we send by mail or prepaid express, and notify you.

SAFE ARRIVAL. We guarantee all goods except sweet potatoes to arrive safely and will refund you for any loss, providing you have Agent make notation of such loss on expense bill and return it to us. This applies on Irish potatoes if time of shipment is left to our judgment.

We also guarantee all seeds that we send out at catalog prices to be carefully selected, and tested. We are always pleased to make good any mistake, but all complaints must be made within 15 days from receipt of goods. On account of weather conditions, etc., we cannot guarantee the crop. You can have the Experiment Station test any of our seed and if not satisfactory will take it back and refund to you.

OUR RESPONSIBILITY. We have been in business here for 28 years. We would be pleased to have you write (enclosing stamp) any bank or business firm here in Lincoln as to our standing.

LARGE ORDERS. Any market gardener, association, or individual requiring large quantities of seeds, are invited to write for special prices. Although we have made our prices in this catalog very low, yet when a considerable quantity in pounds or bushels is wanted, we are in a position to supply at a lower price than by the single pound or bushel. We wish it to be distinctly understood, however, that we will not sacrifice quality in so doing. Mail us a list of your wants, and we will submit to you our lowest cash price for the lot.

FALL CATALOG. Our fall catalog will be ready about July 1. It is brimful of seasonable seeds, plants and bulbs to plant during the summer and autumn months. Don't fail to write for a copy if you do not receive one.

ORDERS WITHOUT MONEY OR ADDRESS. Every year we get hundreds of orders from our customers unsigned. We have at present on our files a number of orders for various amounts, which we are unable to send out as we don't know where to forward them. Every day or so we get a long letter of complaint from some customer, upbraiding us for not sending his seeds promptly. Then we get real busy with this file and endeavor to locate the order. Often it is a hard proposition. So, if you do not hear from us within a reasonable length of time after you mail your order, send us a duplicate order, naming the date on which the former order was sent, the amount of money enclosed, and in what form. We want to satisfy you and don't want you to complain about our service—if we can help it.

NON-WARRANTY.—Most of the failures with seeds, plants and bulbs are due to causes entirely beyond our control, such as unfavorable weather or soil conditions, too deep or too shallow planting, etc., which renders it impossible for us to guarantee success, and although we take all possible care to supply only such goods as will, under proper conditions, produce satisfactory results, we still give no warranty as to description, quality or productiveness of any of the seeds, plants or bulbs we send out, and will not be in any way responsible for the crop, and every article for articles named in this catalogue will be executed on these conditions only. It must be plain to everyone who gives the matter the slightest thought, that it is to our best interest to send out only such stock as will not only grow but prove true to name and description.

FREE SAMPLES. We are always too glad to send you free samples of other Field Seed, for testing purposes. You are not imposing on our good nature if you send us to send you these samples, for we know the quality of the samples will bring.

PRICE LIST

United States Food Administration
License Number G-18171

GARDEN SEED PRICES NOT POSTPAID

On this colored sheet you will find prices of all the different kinds of Garden Seeds displayed in our catalog. These prices are not postpaid. You can order them sent by express or freight, and if you wish them sent by parcel post your Postmaster can tell you the amount of postage required if you will give him the number of pounds in your order, then you can remit the postage along with your remittance for the order and we will send it by parcel post.

At the bottom of page three you will find a condensed parcel post table. By it you can tell about what the postage will be on any given weight.

Some of these prices may conflict with prices given in the catalog. Wherever this occurs be guided by this list, as at the time our catalog was being compiled we could not tell just what the prices were going to be of a great many seeds. This price list cancels all other bulk seed prices given, but remember these are not prepaid.

ASPARAGUS

	oz.	2oz.	1lb.	lb.
All varieties.....	\$10	\$15	\$25	\$85
Asparagus Roots.....	10e per doz.; 75e per 100			

BEANS

	1lb.	5lb.	10lb.	25lb.	50lb.
per lb.	per lb.	per lb.	per lb.	per lb.	per lb.
All Dwarf Wax.....	\$30	\$28	\$27	\$26	\$25
Burpee's Stringless.....	.30	.28	.27	.26	.25
Giant Stringless.....	.27	.25	.24	.23	.22
Red Valentine.....	.27	.25	.24	.23	.22
Tepary White Bean.....	.30	.28	.24	.23	.22
Little Wonder Navy.....	.25	.24	.23	.22	.20
Bush Lima.....	.35	.33	.32	.31	.30
All other Dwarf Green Pods.....	.25	.24	.23	.22	.21

POLE OR RUNNING

	1lb.	5lb.	10lb.	25lb.	50lb.
per lb.	per lb.	per lb.	per lb.	per lb.	per lb.
Cut Short (Corn Hill).....	.25	.24	.23	.22	.20
Dutch Case Knife.....	.25	.24	.23	.22	.20
Early Golden Cluster Wax.....	.35	.34	.33	.32	.31
Large Lima or Butter.....	.30	.28	.27	.26	.25
Lazy Wife.....	.35	.34	.33	.32	.31
Old Homestead (Kentucky Wonder).....	.25	.24	.23	.22	.21
Red Kidney.....	.25	.24	.23	.22	.21

BEETS

	oz.	1lb.	lb.
Early Wonder.....	\$20	\$70	\$2.50
Early Model.....	.15	.60	.25
All other Table Beets.....	.15	.50	1.75
Swiss Chard.....	.15	.60	2.25

MANGEL WURZEL and SUGAR BEETS

	oz.	1lb.	1lb.	5lb.
	per lb.	per lb.	per lb.	per lb.
Corn Saver.....	\$10	\$25	\$80	\$75
Danish Sludstrup.....	.10	.25	.80	.75
Dark Red Giant Eckendorf.....	.10	.25	.80	.75
All other Mangels.....	.10	.25	.80	.75

BRUSSELS SPROUTS

	oz.	2oz.	1lb.	lb.
Improved Dwarf.....	\$20	\$35	\$50	\$1.75

CABBAGE**EXTRA EARLY SORTS**

	oz.	2oz.	1lb.	lb.
Extra Early Express (Lightning).....	\$35	\$65	\$1.00	\$3.00
Earliest Etampes (Earliest of All).....	.85	.65	1.00	.30
Early York.....	.35	.65	1.00	.30
Early Jersey Wakefield.....	.35	.65	1.20	.40
Early Winningstadt.....	.35	.65	1.15	.35
Early Spring.....	.35	.65	1.15	.30

United States Food Administration
License Number G-18171

SUMMER SORTS

	oz.	2oz.	1lb.	lb.
All Head Early.....			\$35	\$65 \$1.20 \$3.50
All Season's (Vandergraw).....			.35	.65 1.15 3.50
Early Dwarf Flat Dutch.....			.35	.65 1.15 3.00
Early Drumhead.....			.35	.65 1.15 3.00
Early Summer.....			.35	.65 1.20 3.00

FALL AND WINTER SORTS

	oz.	2oz.	1lb.	lb.
Autumn King.....			\$40	\$65 \$1.20 \$3.25
Hollander (Danish Ball Head).....			.40	.65 1.20 3.50
Large Late Drumhead.....			.35	.60 1.15 3.00
Lupton.....			.40	.65 1.20 3.00
Premium Late Flat Dutch.....			.35	.60 1.15 3.00
Red Dutch.....			.50	.85 1.25 4.00
Surehead.....			.35	.65 1.15 3.00
Copenhagen Market.....			.45	.80 1.25 3.50

CARROTS**TABLE SORTS**

	oz.	2oz.	1lb.	lb.
All varieties.....			\$20	\$35 \$60 \$1.85

STOCK CARROTS

	oz.	2oz.	1lb.	lb.
All varieties.....			.15	.25 .50 1.10

CELERY

	oz.	2oz.	1lb.	lb.
Celeriac.....			\$30	\$55 \$.95
Giant Golden Heart.....			.35	.60 1.00
Giant Pascal.....			.35	.60 1.00
Golden Self Blanching.....			.50	.90 1.75
Snow White.....			.25	.45 .75
White Plume.....			.35	.60 1.00

CORN SALAD

	oz.	2oz.	1lb.	lb.
Large Leaf.....			\$10	\$.15

CORN—SWEET

	1lb.	5lb.	10lb.	25lb.	50lb.
	per lb.	per lb.	per lb.	per lb.	per lb.
Adam's Extra Early.....	\$15	\$14	\$13	\$12	\$10
Aristocrat.....	.30	.28	.27	.26	.25
Black Mexican.....	.20	.18	.17	.16	.15
Country Gentleman.....	.30	.28	.27	.26	.25
Crosby's Early.....	.25	.23	.22	.21	.20
Early Champion.....	.25	.23	.22	.21	.20
Early Cory.....	.25	.23	.22	.21	.20
Early Evergreen.....	.25	.23	.22	.21	.20
Early Minnesota.....	.25	.23	.22	.21	.20
Extra Early Premo.....	.30	.28	.27	.26	.25
Fodder.....	.15	.13	.12	.11	.10
Golden Bantam.....	.30	.28	.27	.26	.25
Howling Mob.....	.30	.28	.27	.26	.25
Mammoth Sugar.....	.25	.23	.22	.21	.20
Mammoth White Cory.....	.25	.23	.22	.21	.20
Papago.....	.25	.23	.22	.21	.20
Peep O' Day.....	.25	.23	.22	.21	.20
Stowell's Ever-green.....	.30	.28	.27	.26	.25

WRITE FOR PRICES IN BUSHEL LOTS

CAULIFLOWER

	oz.	oz.
Danish Giant (dry weather).....	\$1.75	\$3.00
Early Snowball.....	1.35	2.50
Extra Early Erfurt.....	1.00	1.90

CHIVES

Clumps	15c;	\$1.50 Doz.
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COLLARDoz. 20c; $\frac{1}{4}$ lb. 60c.**CRESS OR PEPPER GRASS**

	oz.	lb.
Extra Curled.....	.20	.50
Water20	.60

CUCUMBERS

	oz.	2oz.	lb.	lb.
Boston Pickling (Green Prolific).....	\$1.10	\$1.15	.25	.75
Early Cluster.....	.10	.15	.30	.90
Davis New Perfect.....	.10	.15	.30	1.00
Early Frame (Short Green) .....	.10	.15	.30	.90
Everbearing.....	.10	.15	.30	.90
Improved Early White Spine .....	.10	.15	.30	.90
Improved Jersey Pickling	.10	.15	.30	1.00
Improved Long Green.....	.10	.15	.30	1.00
Japanese Climbing.....	.10	.15	.30	1.00
Lemon Cucumber.....	.25	.45	.80	2.50

EGG PLANT

	oz.	2oz.
Improved New York Purple.....	\$3.00	\$5.55
Black Beauty.....	.35	.65

ENDIVE

	oz.	2oz.	lb.
All varieties.....	\$2.00	\$3.35	.50

HERBS

	oz.	2oz.	lb.
Dill	\$1.10	\$1.15	.30
Sage .....	.15	.25	.40
Summer Savory.....	.15	.25	.45
Sweet Marjoram.....	.20	.35	.65
Thyme .....	.50	.95	1.75
Lavender .....	.20	.35	.65

KALE or BORECOLE

	oz.	2oz.	lb.
All varieties.....	\$2.25	\$4.45	.85

KOHLRABI

	oz.	2oz.	lb.
Early White Vienna.....	\$2.25	\$4.45	.85
White Vienna (Forcing).....	.25	.45	.85
Early Purple.....	.25	.45	.85

LEEK

American Flag.....	\$1.15	\$3.30	.50
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LETTUCE

	oz.	2oz.	lb.	lb.
All varieties.....	\$1.10	\$2.20	.35	.90

MUSKMELLON**GREEN FLESHED**

	oz.	2oz.	lb.	lb.
Eden Gem or Netted Rock Ford.....	\$1.10	\$2.20	.35	1.25
Rocky Ford.....	.10	.15	.25	.80
Green Nutmeg.....	.10	.15	.25	.80
Extra Early Hackensack	.10	.15	.25	.80
Long Island Beauty.....	.10	.20	.35	1.00
Hackensack (Turk's Cap) .....	.10	.15	.25	.80
Chicago Market.....	.10	.15	.25	.80
Burrell's Gem .....	.10	.15	.30	.90
Delicious Gold Lined				
Rocky Ford.....	.20	.35	.60	2.00

YELLOW FLESHED

	oz.	2oz.	lb.	lb.
Hoodoo			\$1.10	\$1.15
Grand .....			.10	.15
Osage (Miller's Cream).....			.10	.15
Emerald Gem.....			.10	.15
Long Yellow Cantaloupe			.10	.20
Paul Rose (Petrosky).....			.10	.20
Vine Peach.....			.15	.25
Banana Cantaloupe.....			.15	.25

MUSHROOM SPAWNPer brick..... $\frac{1}{4}$ lbs. 25c
2 for 45c; 6 for \$1.40; 12 for \$2.75; by express**MUSTARD**

	oz.	2oz.	lb.	lb.
Chinese			\$1.10	\$1.15
Mammoth Southern Curled .....			.10	.15
White .....			.10	.15

MINT

Roots 15c each; \$1.50 dozen

WATERMELON

	oz.	2oz.	lb.	lb.
Alabama Sweet.....			\$1.10	\$1.15
Black Boulder .....			.10	.15
Halbert's Honey.....			.10	.15
Duke Jones (Jumbo).....			.10	.15
Florida Favorite.....			.10	.15
Kleckly's Sweet (Monte Christo) .....			.10	.15
Tom Watson .....			.10	.15
McIver's Wonderful Sugar .....			.10	.15
All other varieties.....			.10	.20

OKRA or GUMBO

All varieties15 .25 .40 1.25

ONION

	oz.	2oz.	lb.	lb.
Australian Brown	\$3.00	\$5.55	\$1.00	\$3.50
Extra Early Red Flat.....	.30	.55	1.00	3.50
Globe Wethersfield Red..	.30	.55	1.00	4.00
Large Red Wethersfield..	.30	.55	.90	3.00
Mammoth Silver King....	.40	.75	1.40	5.00
Prize Taker.....	.40	.75	1.40	5.00
Red Bermuda.....	.40	.75	1.25	4.50
Southport Red Globe.....	.40	.75	1.40	5.00
Southport White Globe..	.40	.75	1.40	5.50
Southport Yellow Globe..	.40	.75	1.40	5.00
Yellow Globe Danvers....	.35	.60	1.15	4.00
White Portugal (Silver Skin) .....	.40	.75	1.40	5.00
White Queen (Barletta)	.40	.75	1.40	5.00
White Bermuda.....	.40	.75	1.25	5.00

PARSNIPS

All varieties15 .30 \$.50 \$1.75

PEANUTS

Jumbo..... 25c lb; 2 lbs. for 45c

PEAS

	1lb.	5lb.	10lb.	25lb.	50lb.
Alaska	\$2.00	\$2.20	\$1.19	\$1.18	\$1.17
First and Best.....	.20	.20	.19	.18	.17
McLean's Little Gem .....	.20	.20	.19	.18	.18
Champion of Eng- land .....	.25	.23	.22	.21	.20
White Marrowfat..	.20	.18	.17	.16	.15
All other varieties..	.20	.19	.19	.18	.18

Write for prices in larger lots.

PEPPERS

	oz.	2 oz.	1 lb.	lb.
Chinese Giant	\$.80	\$ 1.55	\$ 1.90	
All other varieties.....	.80	1.55	1.85	

POTATOES

NOTE—At the time of issuing this catalog seed potato prices are fluctuating and the market is so unsettled that we are unable to quote a price for any length of time. When you are ready to buy, write us for prices which we guarantee to be as low as good seed potatoes can be bought. It is our opinion that seed potatoes will be somewhat cheaper by planting time.

PUMPKINS

	oz.	2 oz.	1 lb.	lb.
Connecticut Field.....	\$.10	\$.15	\$.25	\$.75
Cushaw (Crookneck).....	.10	.20	.30	1.10
Japanese Pie .....	.15	.25	.35	1.25
King of the Mammoths (Jumbo Potiron).....	.15	.25	.35	1.15
Large Sweet Cheese.....	.10	.15	.25	.85
Small Sugar .....	.15	.25	.40	1.25
Sweet Potato .....	.15	.25	.45	1.25

RHUBARB or PIE PLANT

	oz.	2 oz.	1 lb.	lb.
Victoria	\$.15	\$.25	\$.50	\$ 1.50
Linnaeus .....	.15	.25	.50	1.50
Rhubarb Roots.....	5c each; 50c per dozen			

RADISH

	oz.	2 oz.	1 lb.	lb.
Giant Crimson Globe.....	\$.15	\$.25	\$.40	\$ 1.50
New Sparkler.....	.15	.25	.45	1.50
Chlnese Rose (Scarlet China) .....	.15	.25	.45	1.50
Round Black Spanish.....	.15	.25	.45	1.50
Long Black Spanish.....	.15	.25	.45	1.50
California Mammoth White .....	.15	.25	.45	1.50
Sakurajima .....	.15	.30	.50	1.75
Stuttgart .....	.15	.25	.45	1.50
All other varieties.....	.15	.25	.45	1.50

SALSIFY or VEGETABLE OYSTER

	oz.	2 oz.	1 lb.	lb.
Mammoth Sandwich Island	\$.20	\$.35	\$.60	\$ 2.25

SPINACH

	oz.	2 oz.	1 lb.	lb.
Bloomsdale (Savoy Leaved)	\$.20	\$.35	\$.50	\$ 1.50
Improved Thick Leaved (Long Standing).....	.20	.35	.50	1.50
New Zealand.....	.20	.40	.65	1.75

SQUASH

	oz.	2 oz.	1 lb.	lb.
Fordhook	\$.15	\$.25	\$.45	\$ 1.50
Golden Hubbard.....	.15	.25	.35	1.25
Hubbard, Chicago Warted .....	.15	.25	.35	1.25
Mammoth Chili.....	.15	.25	.35	1.25
Marblehead .....	.15	.25	.35	1.25
Pike's Peak (Sibley).....	.15	.25	.35	1.25
Perfect Gem.....	.15	.25	.35	1.25
Winter Crookneck.....	.15	.25	.35	1.25
All other varieties.....	.15	.30	.40	1.25

SWEET POTATOES

Potatoes ready April 1st. Plants ready about May 1st. (Write for prices on potatoes.) Yellow Jersey..... Write for Prices Yellow Nansemond..... Write for Prices

TOMATO

	oz.	2 oz.	1 lb.	lb.
Acme	\$.30	\$.50	\$ 0.90	\$ 3.50
Beauty .....	.30	.50	.90	3.50
Chalk's Early Jewel.....	.30	.50	1.00	4.00
Crimson Cushion.....	.25	.40	.70	2.75
Dwarf Stone, Livington's.....	.25	.40	.85	2.25
Dwarf Champion (Tree) .....	.25	.45	.85	3.25
Earliana .....	.30	.55	1.00	3.75
Enormous .....	.35	.65	1.15	4.00
Favorite .....	.30	.50	.90	3.25
Golden Queen.....	.35	.65	1.15	4.00
June Pink.....	.30	.50	1.00	4.00
Livingston's New Globe.....	.30	.50	1.00	4.00
Livingston's Hummer.....	.35	.65	1.15	4.00
Livingston's Coreless .....	.30	.50	.90	3.50
Ponderosa .....	.30	.55	1.00	4.00
Quarter Century .....	.30	.55	1.00	3.75
Stone .....	.25	.50	.90	3.50
Trophy .....	.25	.45	.85	3.25
John Baer.....	.50	.90	1.75	6.75

ALL SMALL TOMATOES

Oz. 40c; 2 oz. 75c; 1 lb. \$1.45

TOBACCO

Oz. 20c; 2 oz. 40c; 1 lb. 75c.

TURNIP

	oz.	2 oz.	1 lb.	lb.
Extra Early Purple Top Milan	\$.15	\$.25	\$.45	\$ 1.40
Extra Early White Milan .....	.15	.25	.45	1.40
Extra Purple Top Globe.....	.15	.25	.45	1.40
Early White Flat Dutch.....	.15	.25	.45	1.40
Early White Snowball (Six Weeks) .....	.15	.25	.45	1.40
Golden Ball (Orange Jelly) .....	.15	.25	.45	1.40
Large Yellow (Amber Globe) .....	.15	.25	.45	1.40
Purple Top Strap Leaf Flat .....	.15	.25	.45	1.40
Long White Cow Horn.....	.15	.25	.45	1.40
Pomeranian White Globe.....	.15	.25	.45	1.40
White Egg.....	.15	.25	.45	1.40

RUTA BAGA

	oz.	2 oz.	1 lb.	lb.
American Purple Top.....	\$.15	\$.30	\$.50	\$ 2.00
Skirving's Purple Top Yellow .....	.15	.30	.50	2.00

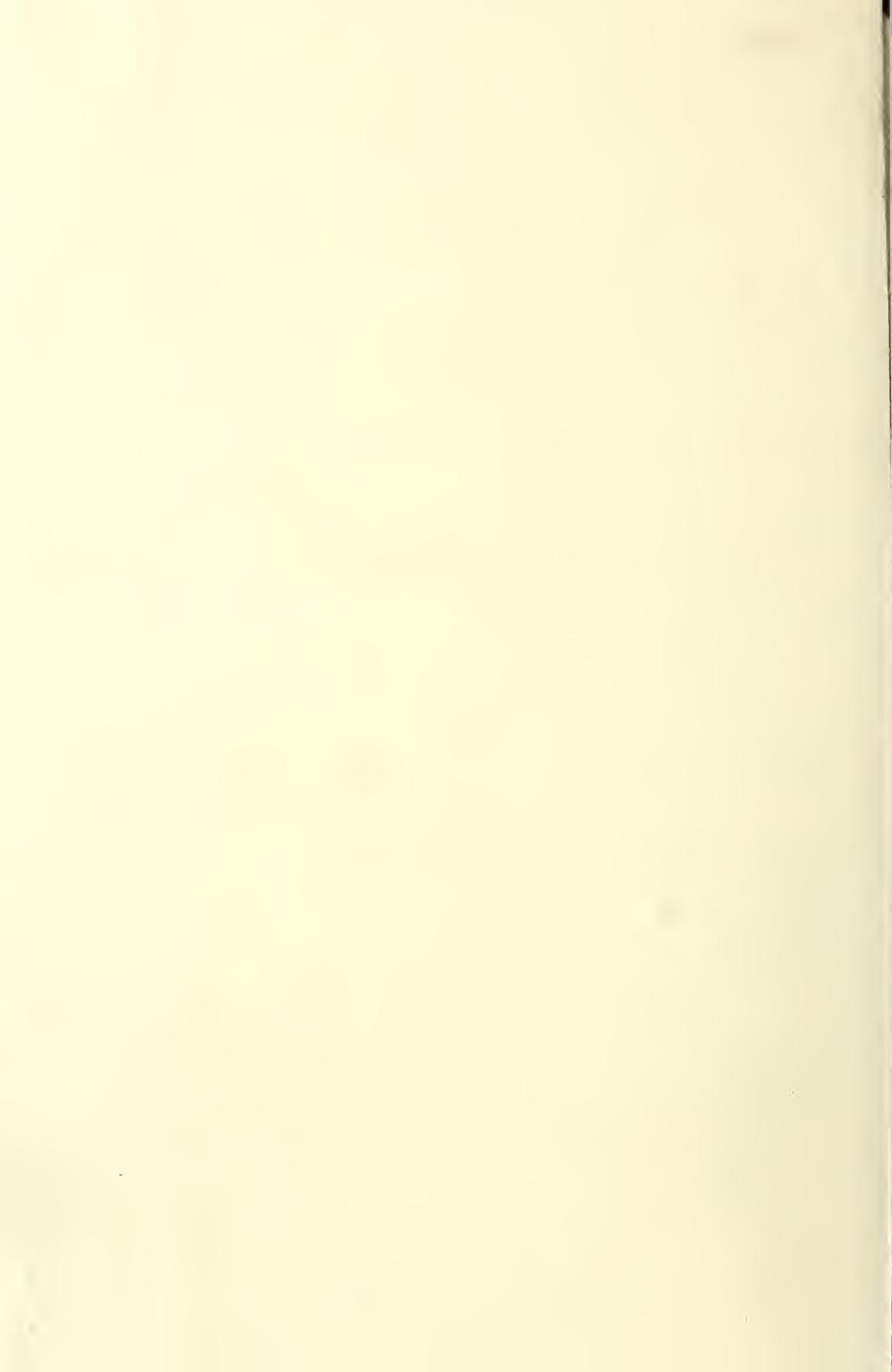
Sweet German (Long
White French)..... .15 .30 .50 2.00

If interested in larger quantities than listed here or an extended list of seeds we would be glad to quote.

DOMESTIC PARCEL POST RATES

First Books, Tools, etc., U. S. and Possessions:	Second or Third Zone:	Fourth Zone:	Fifth Zone:	Sixth Zone:	Seventh Zone:	Eighth Zone:
Within the or fraction	or fraction	or fraction	or fraction	or fraction	or fraction	or fraction
Lincoln or 50 miles thereof	5c	1c				
within 50 to 150 miles of Lincoln	5c	1c				
within 150 to 300 miles miles	6c	2c				
within 300 to 600 miles	7c	4c				
within 600 to 1,000 miles.....	8c	6c				
within 1,000 to 1,400 miles.....	9c	8c				
all over 1,800 miles.....	11c	10c				
			12c	12c		

IN MAKING YOUR ORDER, PLEASE GIVE THE PRICE, TO AVOID DELAY AND ERRORS



Griswold's Lincoln Brand Bacteria THE GUARANTEED Legume Inoculator

INSURES A CATCH

INCREASES THE YIELD

ENRICHES THE SOIL

and

INSURES SUCCESS WITH LEGUMES.

Prepared for

ALFALFA	COW PEAS
SWEET CLOVER	GARDEN BEANS
RED CLOVER	FIELD BEANS
ALSIKE CLOVER	GARDEN PEAS
VETCH	FIELD PEAS
SOY BEANS	SWEET PEAS
MAMMOTH CLOVER	
CRIMSON CLOVER	
AND ALL OTHER LEGUMES	

Easy to apply. Nothing to do but moisten the seed with the Bacteria. Full directions in every package.

PRICE.

Garden Size.....35c

1-acre size..... .50 2-acre size..... .95

4-acre size..... 1.50 6-acre size..... 2.00

If by mail, add 5 cents per acre.

**GRISWOLD SEED & NURSERY CO.
Lincoln, Nebr.**

LEGUMES

Alfalfa, clover, beans, peas, vetch and all pod bearing plants are called legumes. Under certain circumstances these leguminous plants may develop wart like formations on their roots called nodules, each nodule being simply a colony of living germs. Nodules, however, do not develop on the roots of legumes unless one of these living germs, called bacteria, attaches itself to the root of the plant, to form the basis of a nodule.

NODULES

The nodules which form on the roots of legumes are caused by the propagation of bacteria. Whenever one of these bacteria attaches itself to the root of a legume it propagates—increases in numbers, developing, by cell division, from a single individual into millions of its own kind. In fact a nodule is simply a living mass of these bacteria, each one a complete living organism capable of extracting the nitrogen from the air and converting it into a form available to the plant. When these nodules are numerous on the roots of the legume, they contain enough bacteria to extract sufficient nitrogen to supply the plant itself, and in addition, store up vast quantities in the soil for the benefit of future generations of plants. No other plants except legumes will form nodules on their roots, neither can any other plant secure nitrogen from the air. It is not the legume plant but the bacteria on the nodules, which take up the nitrogen. Without nodules, legumes cannot take nitrogen from the air. All the work must be done by the bacteria in the nodules.

BACTERIA

Bacteria are the smallest living organism known, and occupy the border land between the animal and vegetable kingdoms. They multiply by cell division, with inconceivable rapidity, and soon form nodules on the roots of the legume. Millions of these bacteria are found, alive and working, in every nodule, in fact a nodule is simply a mass of living bacteria. They are chemical specialists, taking nitrogen out of the soil atmosphere, out of the air, and storing it in their nodular laboratories in a form available to the plant. They not only furnish the plant with all the nitrogen it requires but store vast quantities of it in the soil for future generations of crops.

KINDS OF BACTERIA

There are many kinds of legume bacteria, differing from each other in shape, size and general characteristics. There is a separate bacteria for each of the legumes. Alfalfa has its own bacteria. There is a separate and distinct germ for the different kinds of beans and peas, as well as a separate germ for each of the clovers, red clover, alsike clover, crimson clover, etc., each having its own germ. Sweet clover, however, has practically the same germ as alfalfa. Mammoth clover being only a development of red clover, has the same germ as the red. With these exceptions each legume has a different germ. Each legume, therefore, must have its own kind of bacteria attach itself to its root or no nodules can be formed thereon, and without nodules no nitrogen can be taken from the air by the plant.

INOCULATION

When a legume crop is planted it should be supplied with its own kind of bacteria. This is called INOCULATION, and can best be done by inoculating the seed, before it is sown, with a pure, high bred culture of bacteria. This places the germ right where it belongs, on the incipient root of the plant. When a healthy bacteria attaches itself to the root of its own legume, it propagates rapidly and soon forms a nodule populated with millions of its own kind. These bacteria will then draw, from that inexhaustible source, the air, all the nitrogen needed to feed the growing plant, and when the roots decay, billions of nitrogen gathering germs will be distributed through the soil, for the benefit of succeeding crops.

BENEFITS OF INOCULATION

The principal reasons for inoculation can be stated in five short paragraphs, viz:—

- First:—Inoculated legumes take nitrogen from the air to supply the plant, resulting in faster growth, earlier maturity and larger crops.
- Second:—Inoculated legumes take up more nitrogen than the plant, itself, requires, the surplus insuring to the benefit of future crops.

Third:—Inoculated legumes develop larger root systems than when not inoculated and therefore reach the immense stores of potash and phosphorous in the sub soil, bringing them up to supply the plant. When the roots and stubble decay these elements are returned to the soil in a form available to future crops.

Fourth:—Inoculated legumes, by taking their nitrogen from the air, save the soil. When not inoculated they drain the soil of its nitrogen just the same as wheat or timothy or other non leguminous plants.

Fifth:—Inoculated legumes contain more proteid matter than when not inoculated, greatly increasing their feeding value.

Summary:—Inoculation hastens maturity, increases the crop, improves its quality, enriches the soil and saves fertilizer bills.



INOCULATED ROOT SHOWING NODULES.

HOW INOCULATING BACTERIA IS GROWN AND SHIPPED

Our BACTERIA is scientifically grown, direct from the nodules, by bacteriologists, who have made this their life work. The laboratories are fitted up with the latest and best equipment, and scientific accuracy is obtained. Each bottle is examined microscopically before shipment.

The bacteria is incubated in the bottle itself, in our improved extra sensitive media, enough food being included to feed the germs. Rubber corks are used, with glass air tubes to supply air to the bacteria and specially prepared cotton is packed in the tubes to filter out intruding mould and other germs. Amber bottles are used to exclude direct light.

This is the only method which permits absolute sterilization, and is in line with the most advanced knowledge in bacteriology.

HOW TO INOCULATE THE SEED

Each bottle of bacteria, as it reaches the customer, is only partially filled with bacteria. When ready to inoculate the seed, remove the rubber cork, fill the bottle about two thirds full of water and stir and shake thoroughly. Spread the seed on a clean floor. Pour the diluted bacteria out of the bottle into a pan, adding enough more water to nicely moisten all the seed. This will require at least a pint for each bushel of seed. Sprinkle the seed either by hand or with a sprinkling can, stirring the seed well with the hands so that each seed is moistened. Dry in a cool, airy place, but keep them out of the sunshine while drying.

SOWING THE TREATED SEED

Inoculated seed should be sown soon after they are sufficiently dry to handle. If slightly moist all the better. It is a good plan to treat the seed in the evening and sow early the next morning. If placed in a dark place, however, they can be kept for many days, but they should be slightly moistened again, with clear water, just before sowing.

WHAT THE EXPERIMENT STATIONS SAY

NEW JERSEY

Bulletin 226, New Jersey Experiment Station, states that inoculation produced an increased yield of 500% on Alfalfa, 75% on Beans, and that Lima Beans and Cow Peas more than doubled.

ALABAMA

Bulletin 87, Alabama Experiment Station, says that inoculation greatly increased the yield of hairy vetch, Canada field peas and crimson clover, as compared with untreated plants. The increase in weight after drying the plants was as follows: Hairy Vetch increased 89%, Canada Field Peas increased 138%. Crimson Clover (young plants) increased 146%.

MICHIGAN

Bulletin 224, Michigan Experiment Station, shows large increase in yield of Soy Beans and Cow Peas, due to inoculation.

CALIFORNIA

BULLETIN 190, ENTITLED "ORCHARD GREEN MANURE CROPS IN CALIFORNIA," BUREAU OF PLANT INDUSTRY, U. S. DEPT. OF AGRICULTURE, says, "The difference between an inoculated and an uninoculated crop of HORSE BEANS in the Sacramento Valley is very marked and is practically the difference between success and failure. When grown without inoculation they amount to but little, although when inoculated they succeed quite well."

SOUTH CAROLINA

Bulletin No. 53, South Carolina Experiment Station, says:—

"Inoculation is not a cure all, but its proper use will send the farmer farther forward in three years than it has been possible for him to go without it in a generation."

LEGUMES MUST HAVE NODULES

"Legumes reach their maximum value as green manures only when abundantly supplied with nodules."—Ext. Farmer's Bulletin No. 315.

PURE CULTURE METHOD CHEAPEST AND MOST EFFICIENT

"All legumes grown either for the purpose of enriching the soil or for the crop must, in order to be of the greatest benefit to the land and the plants, be provided with the nitrogen-fixing bacteria. It is believed that the artificial culture is the method most efficient, cheapest, and freest from objectionable qualities."—Ext. Bulletin No. 71, Bureau of Plant Industry.

LEGUMES CANNOT ENRICH THE SOIL UNLESS BACTERIA DEVELOP THE NODULES

"The peculiar value of legumes for maintaining and increasing the fertility of soils is due to certain bacteria which develop nodules upon the roots of leguminous plants and which have the unique power of rendering the free nitrogen of the atmosphere available for plant growth. Without these bacteria, legumes, like other crops, exhaust the soil of its combined nitrogen."—Ext. Farmer's Bulletin No. 315.

INOCULATION ESSENTIAL TO PRODUCE THE NODULES ON THE ROOTS FOR DEPOSITING OF NITROGEN IN THE SOIL

"It has been amply demonstrated, not only by hundreds of years of actual experience, but by numberless carefully conducted experiments in many countries and under widely varying conditions, that clovers and numerous other legumes supplied with tubercle (nodule) bacteria obtain from the air through the agency of these bacteria, under favorable conditions, all the nitrogen they require, and that they leave in the soil considerable quantities for succeeding crops. In Germany the amount of nitrogen added to the soil by legumes, besides that taken off in the crop, is estimated at 200 pounds per acre. In the United States the average for sixteen States is 122 pounds, equivalent to not less than 800 to 1,000 pounds of nitrate of soda per acre."—Ext. Yearbook of Dept. of Agriculture for 1906.

A MESSAGE TO THE AMERICAN FARMER

America has become the granary of the world. Upon the American farmer rests the burden of supplying, not only the people of our own nation, but of a large part of the world as well. At this critical time it becomes necessary to do all that can be done to increase the food supply. Production must go to the utmost limit, and even then there will be too little.

The American farmer will rise to the occasion—he will do his best. Every aid to increased crop production will be used. Wherever possible, two blades will be made to grow where but one grew before.

Among the aids to an increased food production, INOCULATION has a place. The expert agriculturist with the United State Farm Bureau and the various State Experiment Stations recommend it, and these men know whereof they speak. They experiment first, test before they speak, and when they speak, their words carry weight.

The inoculating bacteria described in this circular is produced according to the most modern methods. It is grown, under the direct supervision of bacteriologists of standing in the profession. Nothing is neglected, nothing left undone.

The price is low; it is sold at a price the farmer can afford to pay. But a better product cannot be made at any price, by any method. This bacteria is right, scientifically right. Use it on your legume crops, especially on the clover, alfalfa, beans, peas and vetch.

1890 To our friends—Our customers 1918



For 28 years the Griswold Company have striven to furnish the choicest seeds, the most up-to-date implements, sprayers, poultry supplies and beekeeper's supplies, and to give the best possible service in every department of its business. In this it has been ably assisted by men and women carefully selected and especially trained for the purpose. The practice of dealing honorably and liberally with customers, growers, manufacturers and employes alike, adopted 28 years ago has always been rigidly adhered to. The consequence is, our business has grown to such proportions that in the busy season we employ over 100 people. We thank you for your liberal patronage of the past, and promise to give your orders in the future the same careful attention that we have in the past.



GRISWOLD SEED AND NURSERY CO.

Planting table for vegetables

This table applies to territory the same latitude as Nebraska. North of that state planting should be later, south earlier.

Vegetables	Time of Planting	Depth to Plant	Hills or Drills	Distance Apart	Amount of Seed or plants Required
Asparagus (Roots)	March and April	6 to 8 in.	Hills	Rows 3 ft. apart.	100 roots for a bed 10x40 ft.
Beans (Bush or Snap)	May 1	2 in.	Drills	Drills 2 to 2½ ft. apart.	1 quart to 100 ft. of drill
Beets	April to June	1 in.	Drills	Rows 18 in. to 2 ft. apart;	1 oz. to 50 ft.
Cabbage Plants	April June	Set plants in ground up to bottom leaves	Hills	Put plants in rows 2 ft. apart	6 oz. seed will produce enough plants for an acre
Carrots	April	1 in.	Drills	Rows 18 in. apart	1 oz. to 100 ft.
Cantaloupes	May June 10	2 in.	Hills	4 ft. x 4 ft.	1 oz. to 50 hills
Corn (Garden or Table)	May 10 to July 10	2 in.	Drills	3 ft. x 12 to 14 in.	1 quart to 200 hills
Cucumbers	May 10	2 in.	Hills	Rows 4 ft. apart x 2 ft. in row	1 oz. to 50 hills
Lettuce (Seed)	April 1 to June 15	½ in.	Drills	Rows 18 in. apart; 8 to 10 in. in row	1 oz. to 3,000 plants
Onion sets	April to June	Press firmly 1 in. in soil	Drills	Drills 18 in. apart	1 quart for 50 ft. of row
Peas (English)	April to June	2 to 3 in.	Drills	Rows 3 ft.	1 quart to 100 ft.
Pumpkins	May 15 to June	2 in.	Hills	6 ft. x 4 ft.	1 oz. to 25 hills
Potatoes (Irish)	April 1 to May 15	3 to 4 in.	Hills	Rows 3 ft. apart x 12 to 14 in. in row.	About 1 peck to 100 feet of row
Radish	Mar. 1 to June 15	1 in.	Drills	Sow thinly in rows 18 in. apart	1 oz. to 100 ft.
Spinach	Mar. 15 to June 1	½ to 1 in.	Drills	Rows 18 in. apart; sow thinly	1 oz. to 100 ft.
Squash	May 1 to June	2 in.	Hills	Rows 3 to 4 ft. apart	1 oz. to 50 hills
Swiss Chard	April 1 to June 1	1 to 1½ in.	Drills	Sow seed thinly in rows 18 in. apart	1 oz. to 100 ft.
Tomatoes Plants	Plants in open April to June	Set plants out up to bottom leaves	Hills	Rows 3 ft. apart	1 oz. to 1,600 to 2,000 plants
Turnips	May 10 to July 25	1 in.	Drills	Sow seed thinly in rows 18 in. apart	1 oz. to 150 ft. of drill
Watermelons	May 10 to June 1	1 in. to 1½ in.	Hills	8 ft. x 8 ft.	1 oz. to 30 hills

Cover Collection

Below we give you complete descriptions of the things portrayed on the front and back cover of this catalog. These are all new vegetables, but have been tested and tried out, so when we ask you to try them we are not asking you to experiment. We know just what the results will be. The regular price of the 5 packages is 65c. We offer them to you for 50c.

SAXA RADISH

At last we have found a good forcing radish, which is also very fine for outdoor culture. In repeated trials the Saxa has been found to reach a remarkable size 3 days earlier than any other forcing variety. The radish at maturity is about $\frac{1}{2}$ the size of Early Crimson Globe. The roots are round or ball shaped; color deep, fiery scarlet with no tinge of purple. Because of its quick maturity and handsome color we consider this the best radish on the market and can recommend it equally well for outdoor culture. Price, pkt. 10c; oz. 35c; $\frac{1}{4}$ lb. \$1.00.

DWARF PONDEROSA TOMATO

An improvement over the old Giant Ponderosa. As its name implies it is not quite so large but otherwise the fruit is very similar. The vines grow in bush or tree form similar to the Dwarf Champion. It has proven a great success wherever grown. Pkt. 15c; oz. 25c; oz. 75c.

WOODRUFF'S EARLY WONDER BEET

A very early beet, maturing earlier than the Crosby's Early. Has a very small tap root and fine deep color. It matures very evenly so that it can all be pulled within a few days after you begin pulling the crop. It is a good beet to sow as a second crop. It is said by market gardeners to be the earliest beet in existence. Price, pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 50c; lb. \$1.50; postpaid.

HONEY DEW MELON

The original seed of this new melon was secured from a melon shipped from Africa to New York City. This seed was planted at Rocky Ford, Colo., and crossed with the genuine, original "Rocky Ford" cantaloupe by pollination. The following season this hybrid seed was again crossed with the improved Hybrid Cassaba. It was named "Honey Dew" because it is as sweet as honey and has the mingling of several flavors,—pineapple, banana and vanilla predominating. The average size of the melon is six inches in diameter and seven to eight inches in length, weighs five to six pounds. The seed cavity is very small, the rind impervious to water, the melon does not shrink in weight, is not easily bruised and is a splendid shipper. Yields at the rate of 8,000 to 10,000 melons per acre. The melon slips from the vine when ripe and will keep for several weeks; the late maturing ones may be kept until Christmas. Will grow where Rocky Ford varieties will thrive. Price, pkt. 15c; oz. 35c; $\frac{1}{4}$ lb. \$1.30; lb. \$4.90; postpaid.

SURE-CROP STRINGLESS WAX BEAN

A valuable variety of Dwarf Wax Bean, which, while not related to the well-known Currie's Rust-proof Wax, bears a great resemblance to it in plant, pod and bean, but is of much better quality. The plant is strong and holds the pods well off the ground and it will stand long seasons of wet weather. Price, pkt. 15c; $\frac{1}{4}$ lb. 35c; lb. 60c; postpaid.

New Seeds and Novelties

GOLDEN PONDEROSA

One of the most interesting novelties ever introduced. It equals Ponderosa in size but bears rich, golden-yellow fruits in abundance.

A yellow tomato that has color to distinguish it, is not entirely novel. Many such varieties have been introduced, but have failed to gain popularity, owing to lack of flavor or some other essential, have disappeared from cultivation. Golden Ponderosa is equal in every respect to its parent the red Ponderosa, possessing all the qualities that have made our Ponderosa a household word throughout the land, and, in addition, has the striking color which compels instant attention. It originated as a "Sport" from the red Ponderosa and comes remarkably true; but some parti-colored fruits may be expected. These but add interest to it. But that which differentiates it from all other sorts is its conspicuous and striking appearance when served sliced with the red Ponderosa. This combination produces an effect appealing to the appetite, and supplies a decorative table effect both novel and attractive. Price, pkt. 10c; $\frac{1}{4}$ oz. 25c; $\frac{1}{2}$ oz. 40c; 1 oz. 75c; $\frac{1}{2}$ lb. \$2.50.

PAPAGO SWEET CORN

We call it Papago because a few kernels were found several years ago on the Papago Indian Reservation south of Tucson, Ariz. It thrives well on heat and grows and produces admirably in an arid section. The stalks grow to a height of about 7 ft, and each one produces from 2 to 4 well filled ears of the sweetest and most delicious corn one ever ate from a cob. In a hot, dry section it will out yield all varieties of Sweet Corn nearly 10 to 1. Price, pkt. 10c; pt. 30c; qt. 55c; 2 qt. \$1.00; postpaid.

LAXTONIAN PEA

A dwarf pea with large handsome Gradus pods. It is slightly earlier than Gradus maturing about same time as Thomas Laxton. Vines medium dark green and medium heavy foliage. Pods $\frac{3}{4}$ to 4 inches long, slightly curved making broad sweep to point. Pods are inclined to bear more abundantly at top of vines and less along stalk, making it an easy pea to pick, a very heavy yielder. Altogether a fine pea for private and market gardeners. Seed light cream color tinged with pale green, large and wrinkled. Height of straw 14 inches. Price, pkt. 10c; $\frac{1}{4}$ lb. 30c; lb. 55c; postpaid.



WHITE WONDER MILLET

White Wonder Millet has been raised in western Kansas for several years and it is just as hardy and vigorous as other millets.

The most striking feature of White Wonder Millet is the size of the heads. This illustration gives an idea of the size of one of the heads and many will be even larger than this one. The heads will run from eight up to eighteen inches and a single head will have as many as 15,000 seeds.

Another very desirable feature of White Wonder Millet is its earliness. This variety is much earlier than German Millet but not quite as early as the Siberian variety.

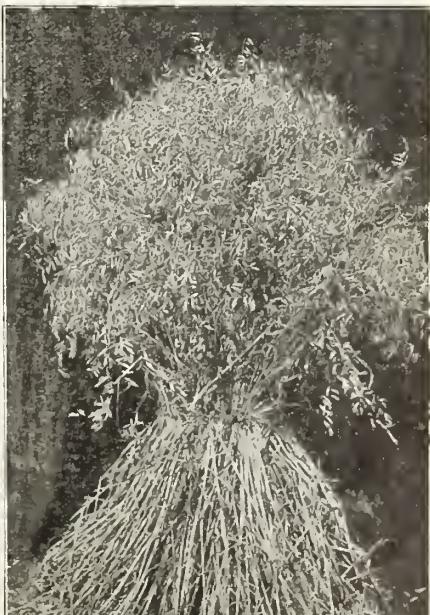
The foliage is very heavy, the leaves broad, and therefore it produces an immense amount of excellent fodder which cures very readily.

We believe that on account of the earliness the immense yield of grain and fodder and the vigorous growth which leave the ground clean, White Wonder Millet will soon take first place among the millets. Price 15c per lb., postpaid. By express or freight, 10 lbs. for 75c; 100 lbs. for \$6.75.

WHITE KHERSON OATS

Known as Uni. Oats No. 21. Almost every farmer knows about Kherson Oats, but very few, up to a year ago, had ever heard of WHITE KHERSON OATS. The White Kherson Oats have been bred up by the University of Nebraska from the original Great Kherson Oats. This oats is even heavier than the common Kherson and is a nice bright white. Last year was the first year we put them on the market. We expected to have a big trade on them and our expectations were more than

realized. If you are not familiar with the common Kherson Oats turn to page 52 and you will find a full description, which applies to White Kherson except as to color. Price, 15c per lb.; postpaid; 40c per pk.; \$1.35 per bu. Write for prices in larger lots.



White Kherson Oats

Shrock Kaffir-Sorghum

THE SEEDS THAT THE SEA GULL SOWED

THE NEW MIRACLE FORAGE CROP — GREAT DROUGHT RESISTER—REMAINS GREEN UNTIL FROST—WILL NOT HEAT IN STACK

Three years of careful study, three years of rigid tests, three years of exacting comparisons, three years of painstaking experiments has demonstrated beyond a particle of doubt that we have a new and distinct type of Kaffir-Sorghum of surpassing merit.

ITS HISTORY—In the spring of 1911, uncounted multitudes of sea gulls of many kinds and different colors, for days hovered over an Oklahoma county. Later on a newly plowed field of prairie sod, much frequented by these birds during their stay, a single plant came up bearing three heads from which this grain has been propagated. Though it likely grows wild somewhere, it is an unknown plant.

The United States Department of Agriculture and the Experiment Stations of Kansas, Texas and Oklahoma have co-operated in its development by seed selection and the U. S. Agronomist named it.

Characteristics—Stocky growth about four feet high, very heavy leafy foliage, very wide leaves, juicy, soft sweet stalk. Erect heads, Kaffir-shaped; seeds deep orange, larger and softer than White Kaffir. All seed heads rise to about same level making easy topping. Suckers from roots, each sucker bearing large head; main stalk side branches at leaf joints, each shoot bearing seed head. Roots go down 7 feet. Stays green and bearing new heads till killed by frost. Largest yielding, surest dry weather grain producer known; also responds prodigiously to irrigation. The stalks and heads never break nor lodge and seed never shatters, no difference how long left in the field. Owing to tightness of the hull, birds do not trouble it as they do the other varieties. Threshes out fairly free of caps. Any livestock with teeth and hoofs greedily eat every particle of the plant. Has record of 70 bushels per acre without irrigation.

Earliness—A month earlier than White Kaffir. Main stalk heads are early, or earlier than feterita if plenty of moisture is in the soil; if moisture is lacking it merely waits for rain, then makes full crop where feterita makes half crop or burns up.

Culture, for Grain and Silage—Drill in rows, three feet apart, using three pounds seed per acre; cover 2 inches deep in most soils. Give good cultivation but run shovels shallow and do not cut off the roots. Remember, however, that no crop thrives mixed up with weeds and baked soil. Kaffir Sorghum will pay you for all work needed to keep it clean.

Because of the suckering, ever-bearing habit, best results are obtained by early planting. Indian corn planting time is about right. Cold ground does not affect its germination and the longer the growing season the larger the crop. Also if fall turns off dry you will have at least first heads made on spring moisture.

For Hay—Drill with wheat drill, 50 pounds per acre. Hay has same value as Sudan Grass and will make more hay with less attention than Sudan.

HARVESTING

For Silage and Dry Fodder.—Cut with corn binder just before frost.

For Grain Only.—Head with light corn knife or beet topper after frost. Stack heads like hay, rick 6 to 8 feet wide. If stacked right they never take water. Turn cattle into stalk-fields; they gnaw stalks into the ground.

For Hay.—Cut with mower or wheat binder when heads are in the dough state, or beginning to harden.



PLANT PRODUCED FROM ONE SEED

Uses—Dry grain has same feeding value as White Kaffir and like White Kaffir for best results should be either ground or fed in the head.

Finest of poultry feed.

Makes best silage in the world because of soft sweet stalk and immense amount of leaves and grain.

Price, lb. 35c; 5 lbs. \$1.50; postpaid. By freight 10 lbs. \$1.35; 25 lbs. \$3.00; 50 lbs. \$5.50; 100 lbs. \$10.00.

VEGETABLE SEEDS

At prices named we pay postage on
Seeds by Packet, Ounce, Pound.

ALL GARDEN SEEDS QUOTED IN THIS CATALOG ARE POSTPAID. FOR QUANTITY PRICES, NOT
POSTPAID, SEE COLORED SHEET ENCLOSED.

Discount on Seeds in packet

Any six of our large 5 cent packages for 25c; 13 for 50c; 28 for \$1.00

In looking through this book, you will find several different sized collections that we have made up for your convenience. Collections of garden and flower seeds suitable for any sized garden. You will save time and money in ordering by collections. Always order by number.

Asparagus

One ounce to 50 feet of drill; 5 pounds to the acre

Sow in March or April, in good mellow soil, after soaking the seed 24 hours in warm water, in drills one foot apart, and one inch deep. During the summer keep the soil mellow and free from weeds thinning the plants to 4 inches apart. The following spring transplant into permanent beds that have been deeply dug and highly manured.

BARR'S MAMMOTH

An early, large-stemmed, green variety. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; postpaid.

COLUMBIAN MAMMOTH WHITE

Produces white stalks of large size and finest quality. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; postpaid.

CONOVER'S COLOSSAL

A mammoth, green sort of the best quality. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; postpaid.

PALMETTO

An early, green sort, prolific and very desirable. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 30c; postpaid.

Asparagus Roots

The ground should be well manured and deeply spaded, the roots planted two feet apart, one foot apart in the row, and at least six inches deep. These will be ready to use in two or three years. 25c per dozen; 50 for 75c; \$1.25 per 100, postpaid. 40c for 50; 75c per 100, by express at your expense.

See Our
Garden Collections
Page 38



Palmetto

WATCH FOR THE BARGAINS IN THIS BOOK.



Admiral Togo

A Standard sort. One of the earliest beans in the market. The pods are of good length, flat, but quite thick and broad. They are waxy golden yellow, and of fine, buttery flavor. Hardy and productive. Price, pkt. 5c; lb. 45c; postpaid.

IMPROVED GOLDEN WAX

Pods are thicker than those of Golden Wax, and of better quality. Price, pkt. 5c; lb. 45c; postpaid.

WARDWELL'S KIDNEY WAX

Pods long, flat, nearly straight, white, handsome, of good quality. One of the very best beans, large, kidney-shaped; white with dark markings about the eye. Price, pkt. 5c; lb. 45c; postpd.

Dwarf or Bush Lima Beans

The Bush Limas are quite desirable for the garden, as their cultivation does away with poles. These should be planted edge-wise with the eyes down and two inches deep. Plant June 1.

HENDERSON'S BUSH LIMA

Grows in compact bush form about 18 inches high. The beans are small in size but of delicious flavor and great productiveness and about two weeks earlier than the others. Pkt. 5c; lb. 45c; postpaid.

BURPEE'S BUSH LIMA

A bush form of true, large Lima. Good yielder, bearing a handsome, large pod, well filled. Pkt. 5c; lb. 45c; postpaid.

FOR QUANTITY PRICES, SEE COLORED SHEET.

Beans

Earliest varieties, ready for table in 40 days; 1 pint to 10 feet of drill; 1 bushel per acre.

The soil best adapted to beans is a light, rich, well-drained loam, which was manured for the previous crop. Beans are extremely sensitive to both cold and wet and it is useless to plant them before the ground has become dry and warm. The largest returns will result from planting in drills from two to three feet apart and leaving the plants two to six inches in the row. Up to the time of blossoming they should have frequent shallow cultivation. Never hoe when the vines are wet, as the pods will become discolored. For succession plant every two weeks.

Bush or Snap**WAX or YELLOW POD VARIETIES****ADMIRAL TOGO**

This grand bean is a wax podded sort with wonderfully handsome and attractive pods averaging 6 inches in length and of an unusually desirable shade of yellow. The table quality is delicious. This sort is usually free from rust and other diseases. Its extreme earliness is also a valuable characteristic, coming, as it does, only about three days behind Extra Early Red Valentine. In productiveness the Admiral Togo is a wonder. It is a grand combination of Extreme Earliness, Wonderful Productiveness, Exquisite Quality and Disease Resistant. We highly recommend it. Price, pkt. 10c; lb. 60c; postpaid.

CURRIE'S RUST PROOF WAX

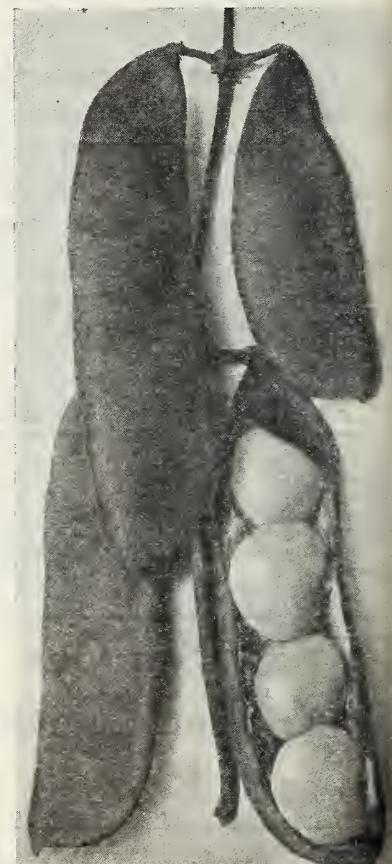
The vine is very vigorous, hardy, and an early and abundant bearer. The pods are long, flat and straight and, of a light yellow color. The beans when ripe are a bluish black. It is an excellent shipper. Price, pkt. 5c; lb. 45c; postpaid.

DAVIS' KIDNEY WAX

Large beans, are pure white, kidney shape, excellent for cooking, green or dry. The pods while young are stringless, tender and of excellent flavor, very long, straight, flat and clear, waxy white. Very productive Price, pkt. 5c; lb. 45c; postpaid.

GERMAN BLACK WAX

A popular variety; pod a waxy yellow, solid, tender, almost transparent, stringless, seeds when ripe jet black. Price, pkt. 5c; lb. 45c; postpaid.

GOLDEN WAX**WAX**

Burpee's Bush Lima

SHORTAGE OF BEANS

We regret to have to report short crops of Dwarf Beans again, due to unsuitable weather conditions, and there being practically no Beans carried over the supply is smaller than that of last spring. We therefore advise our customers to secure their supply early, before stocks have become exhausted.

Dwarf Green Pod Beans

BURPEE'S NEW STRINGLESS

One of the best stringless green-podded beans in cultivation. The pod is round, full, large and straight. In quality it is superior to most other Bush Beans. Pkt. 5c; lb. 40c; postpaid.

GIANT STRINGLESS

This extra early variety is exceedingly productive, bearing round green pods 6 to 7 inches long, very meaty, extremely crisp and absolutely stringless throughout the entire season. Pkt. 5c; lb. 45c; postpaid.

IMPROVED RED VALENTINE

Early and prolific. Pods are remarkably fleshy and tender, and remain a long time without becoming hard. Pkt. 5c; lb. 40c; postpaid.

LITTLE WONDER NAVY

Valuable for field culture; very prolific, excellent dry bean. Pkt. 5c; lb. 35c; postpaid.

LONG YELLOW SIX WEEKS

Hardy, early and productive. A standard sort. Pkt. 5c; lb. 35c; postpaid.

REFUGEE (Thousand to One)

Most prolific green-podded sort, thick and fleshy. Especially desirable for pickling. Pkt. 5c; lb. 35c; postpaid.

TEPARY

Similar to the Navy bean but a little smaller in size. It is a great drouth resister. Price, ptk. 5c; lb. 35c; postpaid.

WHITE MARROW

Good shelled, either green or dry. Pkt. 5c; lb. 35c; postpaid.

Pole Beans

One quart to 200 hills

These are more tender than the Dwarf Beans, and planting should be delayed about a week longer. Set a stout stake about 8 feet long, firmly in the center of each hill, leaving four plants to a hill.

CUTSHORT. (Corn Hill)

A standard sort for planting among corn. It will yield a good crop without the use of poles. Beans nearly oblong, cut off at ends, white with reddish-brown spots. Pkt. 5c; lb. 40c; postpaid.

DUTCH CASE KNIFE

An early corn hill bean. Pods very long and flat; beans flat, kidney-shaped, white, of excellent quality, green or dry. Pkt. 5c; lb. 40c; postpaid.

EARLY GOLDEN CLUSTER WAX

Begins bearing in July, continuing to produce abundantly until frost, large clusters of golden-yellow pods 6 to 8 inches long and of delicious flavor. Valuable either as a shell or snap bean, white seed. Pkt. 5c; lb. 40c; postpaid.

LARGE LIMA (Butter)

Productive. Large flat pods; beans white, of excellent flavor. Pkt. 5c; lb. 35c; postpaid.

OLD HOMESTEAD (Kentucky Wonder)

An excellent green-podded variety; enormously productive, the long pods hanging in great clusters along the entire vine; they cook very tender and melting. Seed dark brown. Pkt. 5c; lb. 35c; postpaid.



Kentucky Wonder

LAZY WIFE

A late bean. Pods long, broad, thick and entirely stringless; rich and buttery; dry beans, white and unsurpassed as shell beans for winter use. Very prolific. Pkt. 5c; lb. 35c; postpaid.

RED KIDNEY

Usually grown for dry beans but excellent also as green shell. Splendid for boiling or baking. These are the old-fashioned Red Kidney. Pkt. 5c; lb. 35c; postpaid.

GRISWOLD'S BEST 4 PACKAGE BEAN COLLECTION NO. 1

15c; POSTPAID

Four of our best beans for home gardens are our Stringless Green Pod, Wardwell's Kidney Wax, Old Homestead or Kentucky Wonder Pole Bean and Henderson Bush Lima. All of these are illustrated and described on pages 7 and 8. We will send you by mail one 5-cent packet of each of these 4 varieties postpaid for 15c. This is your chance to have these 4 splendid varieties at the lowest cost.

FOR QUANTITY PRICE, NOT POSTPAID, SEE COLORED SHEET

Beets

One ounce to 109 feet of drill; 5 to 7 lbs. to acre in drills. The early turnip varieties are ready for the table in from 50 to 60 days from sowing of seed.

The best results are obtained on a deep, rich, sandy loam, in freshly prepared soil, which should be pressed firmly over the seed. In dry weather soak seed 24 hours before planting.

If wanted very early, sow in hotbeds and transplant, cutting off the outer leaves. For general crop sow in drills 18 inches apart, and thin to 3 inches in the row. For winter use, the turnip varieties may be sown in June, and the beets may be kept by storing in a cellar and covered with sandy soil to prevent wilting. To prevent beets losing their color in cooking, do not break the skin. These prices are all postpaid.



EDMUND'S IMPROVED BLOOD TURNIP

Round and smooth, matures early; skin and flesh are of a deep blood-red; sweet and tender; an excellent keeper.

EARLY MODEL

A perfect globe in shape with a very small tap root. The color of the flesh is equal to that of the best long beet in existence. The foliage is very small. The beets are always smooth and of the deepest blood red color while they quickly attain a good size. Price, pkt. 5c; oz. 15c; 1 lb. 60c; postpaid.

ECLIPSE

An extra early variety with round smooth, blood-red roots. Matures very early and is popular both for market and home garden.

HALF LONG BLOOD

An entirely distinct variety, and the best for winter use. The roots are pear shaped, smooth, flesh a rich, dark red, crisp, tender and very sweet, never becoming woody, and retaining its excellent quality longer than any other sorts.

LONG DARK BLOOD

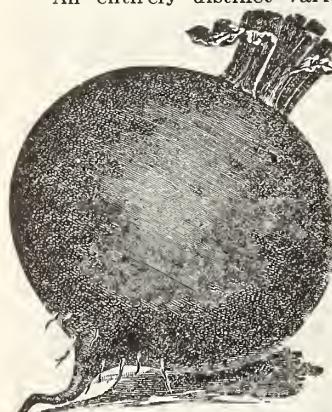
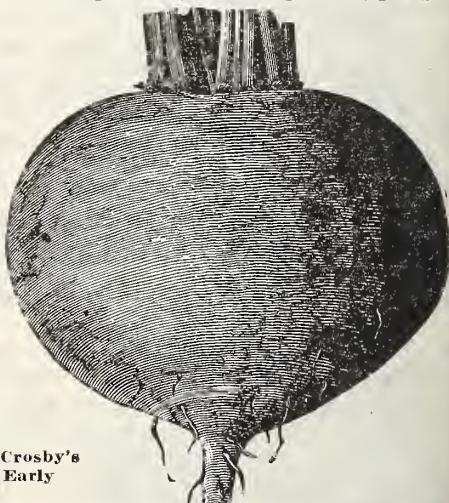
Tops large, with good sized, long roots, tapering and growing even with the surface; dark red; flesh sweet and tender, remaining so until spring. A popular winter sort. An excellent keeper.

SWISS CHARD

Grown for its leaves only; mid-rib is cooked and served like asparagus, leaves used for greens. Pkt. 5c; oz. 15c; 1 lb. 60c; postpaid.

**PRICES OF ALL BEETS ON THIS PAGE
EXCEPT EARLY MODEL AND EARLY WONDER**

Pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.



MARKET GARDENER'S PRICE LIST—SEE COLORED SHEET

Brussels Sprouts

Matures 140 to 150 days from seed

Brussels Sprouts are highly valued in all European countries but are not generally appreciated here. Thousands and thousands of native-born Americans have never tried them and do not know what palatable and nutritious vegetables they are. They should be in every garden.

Culture same as for early or late cabbage, depending on whether an early or late crop is desired, with the exception that the seed should be sown a few days earlier and when the plants are planted out they should be set 15 inches apart in rows 2 feet apart. One ounce will sow 200 feet of drill. The stem which usually grows from 20 inches to 2 feet in height, is covered with "miniature cabbages" which may be boiled like cabbage or cooked in cream like cauliflower. They are by all means the most delicious and delicately flavored of the cabbage family. On this variety the heads grow very closely and its quality is the finest. Price, pkt. 5c; oz. 20c; 1 lb. 55c; postpaid.

Broccoli

The culture is the same in all essentials as for Cauliflower, in fact, it is a good deal like Cauliflower. It is grown most successfully where the season is long, cool, and rather moist. One of the most valuable features is that it withstands greater extremes of temperature than Cauliflower.

NEW WHITE CAPE

A very desirable variety. It has medium sized heads, close and compact, and of a beautiful creamy white color. A sure header. Price, pkt. 5c; oz. 40c; postpaid.

Cauliflower

(For Cauliflower Plants see below)

These need a deep, rich, moist soil, and require the same treatment as cabbages. For early summer varieties, seed should be sown in hotbed early in March, transplant when weather is warm. For late or autumn varieties, sow in March or April, transplant in June. Hoe often.

DANISH GIANT. (Dry Weather.)

The merits of this first class cauliflower is recognized by its increasing popularity. The crop is 2 or 3 weeks earlier than the Earliest Erfurt. The heads are pure white and of fine quality. The plants are less affected by dry weather than any other variety, making it very valuable for dry sections. Price, pkt. 5c; 1/2 oz. \$1.75; oz. \$3.00; postpaid.

EARLY SNOWBALL. (Early Selected.)

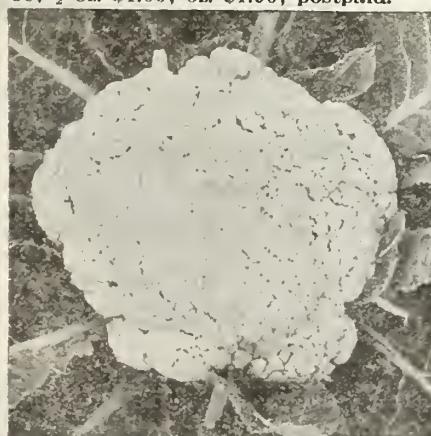
This very superior strain is noted for producing plants of dwarf habit, short, compact growth, and uniform shape. It is extremely hardy and one of the surest to make a solid head. For forcing or planting in open ground no other variety can surpass it. Good for early, second early, and late planting. Price, pkt. 5c; 1/2 oz. \$1.35; oz. \$2.50; postpaid.

EXTRA EARLY ERFURT

A very fine strain producing large, white, firm heads close and of excellent quality. Dwarf, early and always certain to head, early or late. Larger and larger than Earliest Erfurt. Price, pkt. 5c; 1/2 oz. \$1.00; oz. \$1.90; postpaid.



Brussels Sprouts



Early Snowball

Vegetable Plants

We grow great quantities of Cabbage, Cauliflower, Celery, Tomato and Sweet Potato Plants
FOR VARIETIES SEE PAGE 38

	Ready	Per doz	Per 25	Per 100	Postpaid	Per doz	Per 100	By Your Expense
Early Cabbage.....	Apr. 25	\$0.20	\$0.30	\$0.90	\$0.15	\$0.85	100	1000
Late Cabbage.....	May 10	.15	.25	.85	.15	.75	.55	
Early Tomato.....	Apr. 25	.25	.45	1.00	.20	.90	.80	8.00
John Baer Tomato.....	Apr. 25	.30	.50	1.50	.25	1.00	9.00	
Dwarf Ponderosa Tomato.....	Apr. 25	.35	.60	1.75	.30	1.50	10.00	
Late Tomato.....	May 10	.20	.30	.90	.15	.80	7.00	
Cauliflower, Snowball.....	May 10	.25	.45	1.25	.20	1.00	9.00	
Egg Plant.....	May 10	.25	.45	1.25	.20	1.00	8.00	
Early Celery.....	May 10	.20	.35	.75	.15	.60	5.50	
Late Celery.....	June 1	.20	.30	.75	.15	.50	4.50	
Pepper.....	May 10	.25	.45	1.25	.20	1.00	9.00	
Sweet Potatoes.....	May 10	.....	.....	.65	.....	.50	4.50	
Asparagus Roots.....		.25	.40	1.00	.....	.70	6.00	
Rhubarb Root.....		10c each			\$1.00 per doz.			60c per doz.

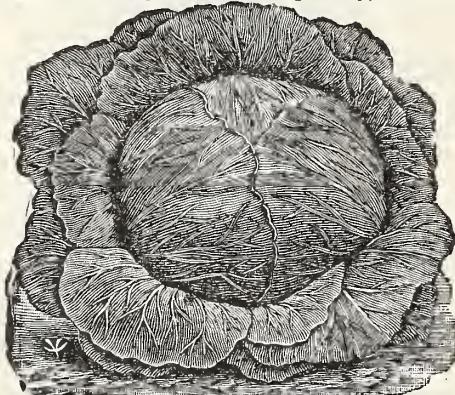
FOR QUANTITY PRICE LIST, SEE COLORED SHEET.

Cabbage

One ounce to 5,000 plants; 2 ounces to transplant an acre. Ready for table in from 100 to 160 days from seed, according to varieties.

For Cabbage Plants see Page 9.

For early summer use sow in hotbed in February or March. Before transplanting to the open ground they should be hardened off by exposing them gradually to the night air. For winter use sow in open ground in May or June, taking care in either case not to let the plants stand too closely, as this makes them "spindling." When five or six inches high, transplant in rows two feet apart one way, and 12 to 18 inches the other way, according to variety, burying to the first leaf, whatever the stem length. Hoe frequently, drawing the earth up about the plants until they begin to head.



Copenhagen Market

are features which have made this cabbage a standard in three years' time. A money maker for the market gardener. Price, pkt. 5c; 1 oz. 25c; 1 oz. 45c; 2 oz. 80c; 1 lb. \$1.50; postpaid.

EARLY SPRING

The earliest, flat-headed variety. A wonderful compact plant with few outer leaves. Ready for use as soon as Early Jersey Wakefields. The head is oval and very large for the size of the plant, nearly equaling many of the later kinds. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.

EXTRA EARLY EXPRESS

The earliest variety in existence and produces rather small heads long before the Jersey Wakefield or other varieties have begun to head up. Heads solid, have few outside leaves, and can therefore be planted very close and yield a large crop. It is a most important variety for the gardener. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25. Postpaid.

EARLIEST ETAMPES

Earliest of All. Extremely early, with small, quite solid, pointed heads; excellent quality. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.

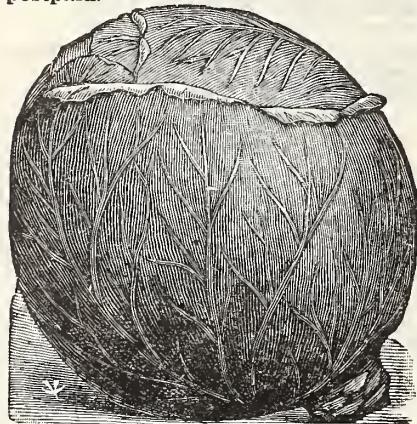
EARLY JERSEY WAKEFIELD

Most gardeners depend upon it for the bulk of their extra early crop. Heads conical, very compact, solid and of excellent quality.

Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.

EARLY WINNINGSTADT

One of the best, being very hardy and sure to head; suffers less from the cabbage worm than any other sort; heads regular, conical very hard and keep well. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.



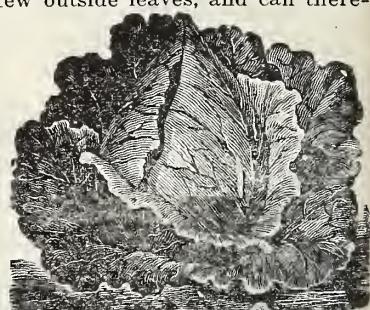
All Season's

FOR QUANTITY PRICES, SEE COLORED SHEET.

Extra Early Varieties

COPENHAGEN MARKET

Best early flat-headed cabbage. The illustration is a good representation of a splendid new early cabbage, one our customers should not overlook. It is the earliest large round or flat-headed sort. The ripening is early and uniform all maturing at one time and almost with Early Jersey Wakefield (oblong head). Considering its early season, the heads are remarkably large, averaging ten pounds in weight. One of its chief features is compactness; its leaves, which are light green are round, dish-shape and fold tightly together in remarkably compact and solid form; it is so solid that many more plants can be grown on an acre than is possible with most sorts. It has few outer leaves, which permit close planting, and it grows close to the ground on a short stem. The entire crop can be harvested at one time and thus clear the field for other crops. In quality it is exceptionally good; early, ripening at one time, compact growth, large heads and high quality a standard in three years' time. A trade holder and a big money maker for the market gardener. Price, pkt. 5c; 1 oz. 25c; 1 oz. 45c; 2 oz. 80c; 1 lb. \$1.50; postpaid.



Early Jersey Wakefield

EARLY YORK

Very early; small heartshaped. Firm and tender. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.

Second Early or Summer Varieties

EARLY DRUMHEAD

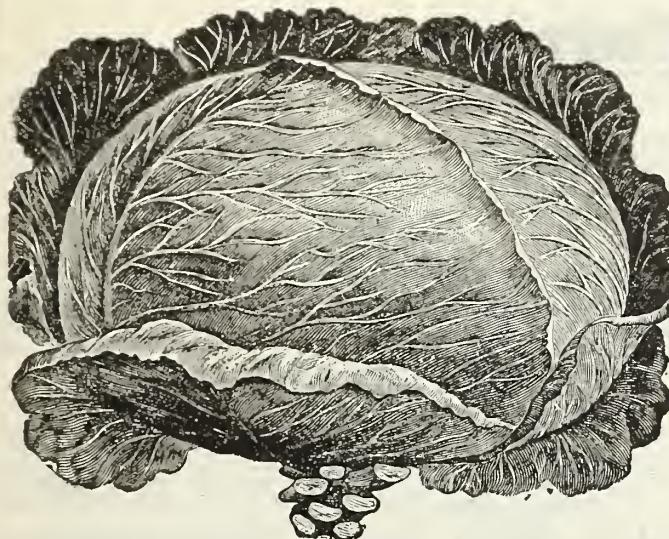
A fine strain; of dark bluish-green color, plant very hardy; compact, flat head. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.

EARLY DWARF FLAT DUTCH

An early cabbage of good size. Heads are flat and very solid. Price, pkt. 5c; oz. 4c; 1 lb. \$1.25; postpaid.

EARLY SUMMER

Deservedly popular with market gardeners throughout the country. It forms large, solid, round, flattened, compact heads of excellent quality, tender and sweet. The heads average over double the size of the Jersey Wakefield, weighing eight to ten pounds each, while it matures only ten or twelve days later. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.



Late Drumhead

Late or Winter Varieties

AUTUMN KING

Is extremely large and solid. Flat headed late variety. The plant is of extra strong growth, with dark bluish-green leaves. Splendid winter variety. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.

HOLLANDER

(Danish Ball Head.) Hardest heading variety known. Remarkable for great weight and long-keeping qualities. The heads are of medium size, exceedingly tender, crisp, solid, with no waste heart. Price, pkt. 5c; oz. 50c; 1 lb. \$1.50; postpaid.

LARGE LATE DRUMHEAD

A favorite winter variety, extra large, solid heads; slightly later than the Flat Dutch. Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.

PREMIUM LATE FLAT DUTCH

(Selected Strain.) The great cabbage for fall and winter. The large oval, solid heads are flattened and of splendid quality. Will keep in the best condition for a long time. Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.

RED DUTCH

The best, largest and surest heading red cabbage. Used mostly for pickling. The plant is large, with several spreading leaves. The head is large, round, very solid and of deep red color, averaging from ten to twelve pounds in weight. Price, pkt. 10c; oz. 50c; 1 lb. \$1.50; postpaid.

SUREHEAD

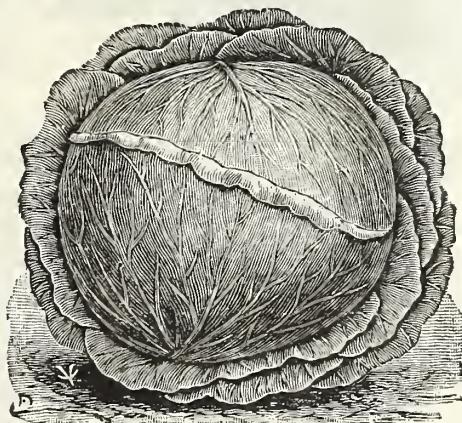
This cabbage never fails to make a fine, solid, large head, with few outer leaves. It is a vigorous grower, maturing late. First-class main crop variety. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.

SUMMER VARIETIES—Continued ALLHEAD EARLY

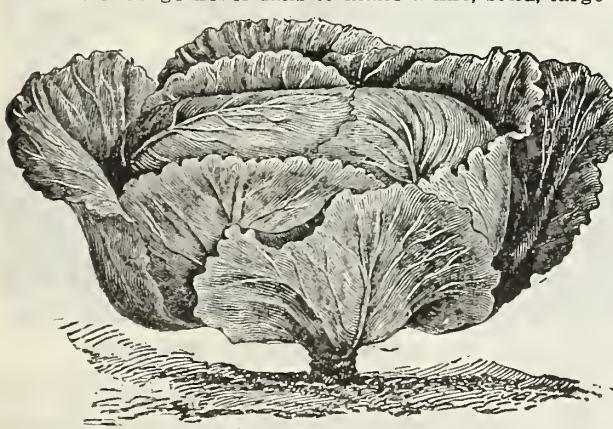
Earlier than any other large cabbage, larger than any other early cabbage. Heads deep, flat, solid, uniform and very tender owing to its rapid growth. An all-the-year cabbage. We consider this one of the best second-early sorts on our list and recommend it both for home and market. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.

ALL SEASONS. (Vandergaw.)

This excellent sort is early, maturing a week or ten days after All Head Early; makes larger and harder heads than that sort, averaging ten to fifteen pounds in weight. Truly an all-seasons variety, fine for summer market and heads are so large, thick and solid that it is excellent for keeping through the winter. Price, pkt. 5c; oz. 40c; 1 lb. \$1.25; postpaid.



Hollander



Premium Late Flat Dutch

Sargent, Nebr., Febr. 19, 1917.
Dear Sirs:

We have been using your seeds for several years now and are always well pleased.

Yours truly,
L. CARL COLE.

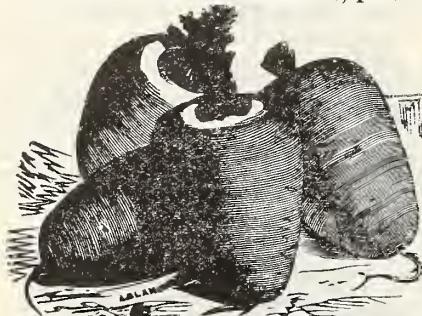
FOR QUANTITY PRICES, SEE COLORED SHEET.

Carrots

One ounce to row 100 feet long. $2\frac{1}{2}$ lbs. per acre. Ready for table in from 95 to 120 days from seed, according to variety.

Any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early as the ground can be worked, sow the smaller kinds in rows 16 to 18 inches apart. For field culture sow in drills 18 to 24 inches apart. Cover one-half to one inch deep and see that the soil is pressed firmly above the seed. Do not let the weeds get a start. Thin to three to six inches apart in the rows as soon as the plants are large enough. For winter use gather and store like turnips.

Price of all Table Carrots, pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; postpaid.



Guerande or Ox Heart

flesh fine grained and of agreeable flavor; tops small; has a short stump-shape root. Grows well in shallow soil one of the best for early outdoor planting and for table use.

HALF LONG STUMP ROOT

The tops are of medium size, roots deep orange, large, tapering to a dull point. Smooth, crisp and tender.

HALF LONG SCARLET NANTES

The leaves are fine, the roots are almost cylindrical, very smooth, of good shape and size, and about six inches long; the flesh is red and very sweet. They are easily pulled and keep well. A most excellent sort.

IMPROVED LONG ORANGE

Large, smooth, and of rich orange color. A good keeper, of fine quality for table use, and highly nutritious for stock.

OX HEART or GUERANDE

(See Cut). A thick carrot, five inches long and very blunt at the lower extremity. It grows very rapidly, and the roots attain a weight of more than a pound. It is tender, of good flavor and of a deep orange color and is a variety we can recommend to all market gardeners.

IT WILL PAY YOU TO LOOK ON PAGE 21

Carrots for Stock

Sow 4 to 6 lbs. to the Acre in April or May

These are undoubtedly the most valuable of all the roots usually grown for stock. They are more nutritious than turnips and nearly all animals like them and are benefitted by them.



LARGE YELLOW or VICTORIA

Largest, heaviest cropping and most nutritious variety in cultivation; roots fine, of light orange color, and possessing high feeding properties; good keeper. Price, pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50; postpaid.

LARGE WHITE BELGIAN

Grows one-third out of ground. Roots pure white, green above ground with small top. Flesh rather coarse. The roots grow to a large size. Price, pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; postpaid.

FOR QUANTITY PRICES, SEE COLORED SHEET.

Celery

One ounce to 3,000 plants or 200 feet of lrl.

Sow the seed (which is slow to germinate) in shallow boxes or hotbed, cover the seed not too deep. Keep the bed moist, almost wet, until the seeds germinate. When about four inches, thin out and transplant so that they may stand three inches apart, when the plants are four inches high, cut off the tops, which will cause them to grow stocky. The essentials to success in celery growing are rich soil and plenty of water. The best results are usually obtain from setting about the middle of June or the first of July. In setting, prepare broad trenches about six inches deep and four to six feet apart in which the plants should be set six inches apart, cutting off the outer leaves and pressing the soil firmly about the roots. Cultivate freely. Earth up a little during the summer, keeping the leaf stalks close together, so that soil cannot get between them. Finish earthing up in autumn and never hoe or earth up when plants are wet, as this would be likely to cause them to rust or rot.

To keep celery for winter, dig trenches a foot wide and as deep as the tops of the plants. Stand celery in these erect, with what dirt adheres to the roots, packing closely, but not crowding. It should be covered with straw or leaves a little at a time as the cold becomes greater. Celery will bear a good deal of frost.

CELERIAC GIANT PRAGUE

The roots of this celery are turnip-shaped, large and smooth; are almost round and with a very few side roots. Sweet and tender and may be cooked like turnips or eaten like radishes; used largely for seasoning meats and soups. Price, pkt. 5c; oz. 40c; 1 lb. \$1.00 postpaid.

GIANT GOLDEN HEART

This variety attains a large size, but still remains crisp and tender. It is a fine keeper and a favorite for market. Price, pkt. 10c; oz. 40c; 1 lb. \$1.00; postpaid.

GIANT PASCAL

One of the best for fall and winter use. The stalks are very large, solid, crisp and of rich, nutty flavor. It blanches very easily and quickly. The heart is golden yellow, very attractive. Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.

GOLDEN SELF-BLANCHING

This is without doubt the best celery for general use, the ribs are perfectly solid, crisp, brittle and of delicious flavor, while it has the decided merit of being self-blanching to a very remarkable degree. The heart is large, solid and a beautiful rich, golden yellow. It is decidedly the best keeper of all the self-blanching varieties. Price, pkt. 5c; oz. 50c; 1 lb. \$1.75; postpaid.

SNOW WHITE

A pure white variety. It is vigorous in growth, rich in flavor and crisp; grows solid on all kinds of soil, and is an excellent keeper. Price, pkt. 5c; oz. 30; 1 lb. 75c; postpaid.

WHITE PLUME

(See cut.) A variety specially adapted to cultivation by amateurs, as its inner stalks and leaves are naturally white. By simply tying up the stalks and drawing up the soil with the hoe the work of blanching is complete. It is tender, crisp and of good flavor. The earliest celery in cultivation, but will not keep longer than Christmas. Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.



White Plume

Chives

CHIVES (Schnittlouch.)

A perfectly hardy plant, something like an onion. Tops are cut off from time to time and used to flavor soup. Price, seed, pkt. 10c. Clumps, 25c each; postpaid. By express, \$1.50 per dozen.

Cress or Peppergrass

Ready in from 21 to 40 days. Cress should be sown in a sheltered spot quite thick in shallow drills, in a short time it will be fit for cutting. Sow frequently, as it matures rapidly.

EXTRA CURLED

This small salad is much used with lettuce. The warm, pungent taste makes a most agreeable addition. Price, pkt. 5c; oz. 20c; 1 lb. 50c; postpaid.

WATER CRESS

Hardy perennial, growing rapidly on the banks of streams or ponds. Price, pkt. 5c; 1 oz. 35c; oz. 60c; postpaid.

Celery-Cabbage

In appearance it is more like Stalk Celery or Cos Lettuce than real Cabbage, but to the palate a delicious celery-flavored cabbage, which may be served as a salad, as hot or cold slaw or boiled, minced and seasoned with butter or cream sauce. The seed should be sown during summer for use in autumn or winter. Sow in drills 16 to 20 inches apart, thinning out in the rows two or three times as necessary. Price, pkt. 10c; oz. 50c; 1 lb. \$1.75; postpaid.



Cress or Pepper Grass

Collard

The Collard makes excellent greens and is also excellent for all kinds of stock. The leaves may be pulled from underneath the head of the plant and cattle, hogs and poultry are very fond of it. Such action does not injure the growing and preserving of the Collard for human food. It grows readily in any kind of soil, and heavy frosts or even icy weather does not hurt it. Plant same as cabbage. Price, pkt. 5c; oz. 20c; 1 lb. 60; postpaid.

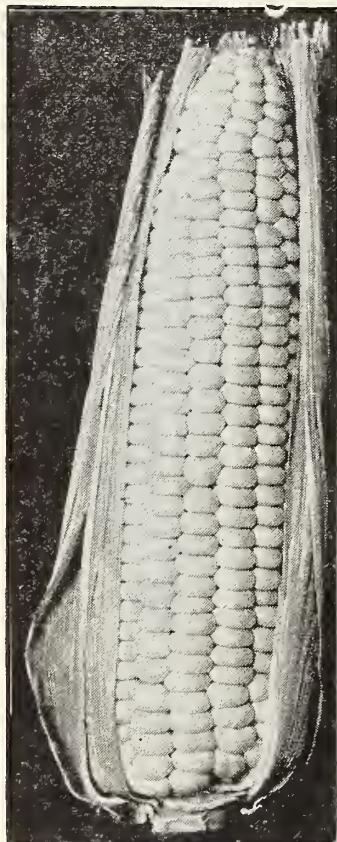
TO MAKE A HOTBED, SEE PAGE 23

FOR QUANTITY PRICES, SEE COLORED SHEET.

Sweet Corn

One lb. will plant 100 hills; 15 to 20 lbs. to an acres, in hills.

Sweet Corn being liable to rot in cold, wet ground should not be planted before May, or until the ground has become warm; practically nothing is gained in time, and much is lost in quality by planting too soon. To have the finest sweet corn it must be picked in just the right condition, that is when the skin of the grain breaks at the slightest punctures, and planting could be made every two weeks to have a supply at this stage. Plant in rich ground in hills three feet apart each way, covering about half an inch, and thin out to three plants to a hill. The extra early varieties can be planted closer. Give frequent and thorough but shallow cultivation until the tassels appear.



Peep O'Day

Only a few days later than the extra earlies, bearing large, handsome, twelve-rowed ears. Deep, white, plump, grains of milky tenderness and very sweet. Very productive. Price, pkt. 5c; lb. 30c; postpaid.

EXTRA EARLY PREMO

A real Sweet Corn as early as Extra Early Adams. Large sweet and tender. Plant early, as it will stand some frost. Price, pkt. 5c; lb. 35c; postpaid.

MAMMOTH SUGAR

Produces the largest ears of any sort; excellent quality, sweet, tender, delicious; late variety. Price, pkt. 5c; lb. 30c; postpaid.

MAMMOTH WHITE CORY

Nearly as early but larger than Early Cory. The ears are 12-rowed; grains are broad, very white and of excellent quality for an early sort. Price, pkt. 5c; lb. 30c; postpaid.

STOWELL'S EVERGREEN

The standard main crop variety. It is hardy, large-growing and productive, very tender and sugary, remaining a long time in condition suitable for boiling. Price, pkt. 5c; lb. 30c; postpaid.

LOW PRICES ON SEED, SEE COLORED SHEET.

Medium early, about six feet in height, with one or two fine ears eight inches in length, with eight rows of large grains, which when in condition for the table cook remarkably white, but the ripe grain is black or bluish-black. It is surpassed by none in tenderness. Price, pkt. 5c; lb. 25c; postpaid.

BLACK MEXICAN

ARISTOCRAT

The Peer of All Sweet Corn

This delicious sweet corn was first introduced a few years ago. It is a reliable extra sort and an extra early variety, stalks grow 4 to 6 ft. high and ears of large size. Grains are extremely sweet and, being broad, allow of easy scoring with a knife preparatory to buttering when eating from the cob. Price, pkt. 10c; lb. 35c; postpaid.

COUNTRY GENTLEMAN. (Shoe Peg.)

Has a small cob densely covered with irregular rows of very long, slender grains of fine quality. Price, pkt. 5c; lb. 30c; postpaid.

CROSBY'S EARLY

Remarkably early and of the best flavor. Ears of medium size, twelve-rowed, with grains very tender and sweet. Price, pkt. 5c; lb. 30c; postpaid.

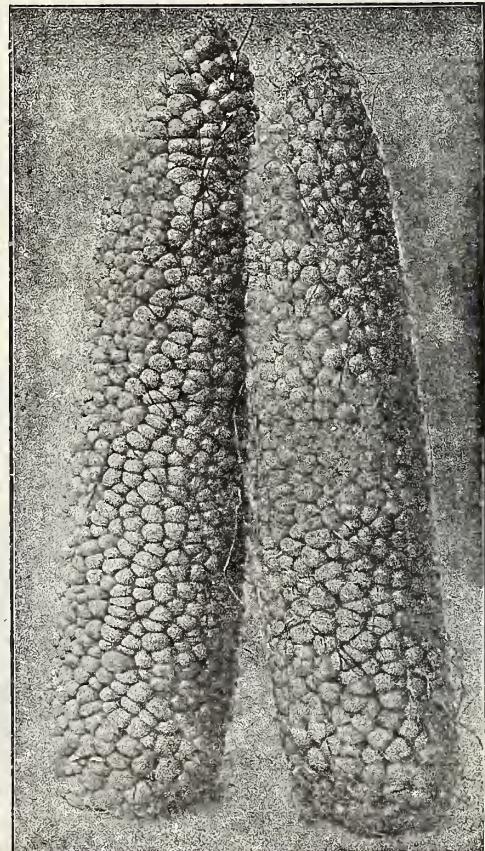
EARLY EVERGREEN

This is a very popular Sweet Corn. It is in the second early class, comes to maturity fully 10 to 12 days earlier than Stowell's Evergreen and yields large, handsome ears of most delicious flavor. It has a ready sale in the market on account of its handsome appearance and earliness. Price, pkt. 5c; lb. 30c; postpaid.

EARLY MINNESOTA

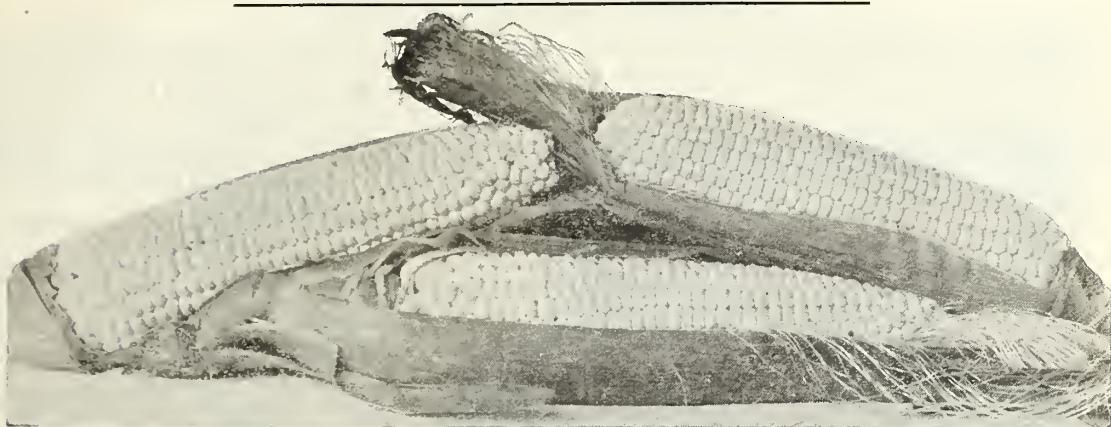
One of the best early sorts for the market or private garden. Stalks four to five feet high and bearing one or two long, eight-rowed ears; kernels very broad, sweet and tender, not shrinking much in drying. Price, pkt. 5c; lb. 30c; postpaid.

EARLY CHAMPION



Country Gentleman

Sweet Corn--Continued



GOLDEN BANTAM

Extremely hardy, can be planted earlier than any other true sweet corn, thus producing the earliest supply. Ears 6 inches long, with 8 rows of grains, which are a golden yellow when ready for use. Can be planted thickly, and every stalk should have from 2 to 3 perfect ears. Price, pkt. 5c; lb. 35c; postpaid.

HOWLING MOB

Its peculiar but apt name refers to the vociferous demand for the ears when the originator, Mr. Keller, took them to market. The stalks are of strong, vigorous growth, 4½ to 5 feet in height, have abundant foliage and generally produce two fine ears to a stalk. The ears measure from 7 to 9 inches in length with twelve to fourteen rows of good sized pearly-white grains. The ears are covered with a heavy husk which extends well out from the tip and affords good protection from the green worms which are so often destructive of early Sweet Corn. Price pkt. 5c; lb. 35c; postpaid.

PEEP O'DAY

The two points of this new corn are its extraordinary earliness and sweetness. It is also very productive, the stalks bearing from two to five ears, are very dwarf, which admits of their being planted close together. Price, pkt. 5c; lb. 35c; postpaid.

Howling Mob

POPCORN

QUEEN'S GOLDEN

The largest of all popcorns. The stalk grows five to six feet high, and bears two to three large ears each. It is yellow, but pops creamy white, and of excellent quality. Price, pkt. 5c; lb. 25c; postpaid.

WHITE RICE

A prolific variety. Ears short; kernels long, pointed and white. Probably no variety of popcorn is superior to this for popping. Price, pkt. 5c; lb. 25c; postpaid. Ask for prices on popcorn in large lots.

BABY GOLDEN POPCORN

Smallest popcorn in existence. It is very prolific, producing from 5 to 10 ears on a single plant. The stalks do not exceed 3 feet in height and the ears from 1½ to 2½ inches in length. The kernels are but very little larger than a kernel of rice, of a handsome, lustrous, light golden color, and pop without leaving any hard center. Price, pkt. 5c; oz. 10c; ¼ lb. 15c; lb. 35c; postpaid.

Corn Salad

This is a hardy winter salad, the small leaves being served like lettuce during the cool fall and early winter months. It is used also for garnishing meat dishes in the same manner as parsley and cress. The seed should be sown thinly in drills during August, September and October to supply fresh leaves during the cool fall and winter months. It is quite hardy, and after cool weather sets in can be protected by a thin mulch of hay or straw. Price pkt. 5c; oz. 10c; postpaid.

Egg Plant

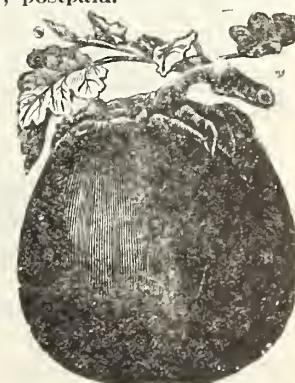
One ounce to 1,000 plants. Ready for table in 145 to 160 days. A tender plant, start early in hotbed or in the house. Plant out early in June, care being necessary to prevent plants being chilled by the change.

BLACK BEAUTY

Is ten days to two weeks earlier than New York Improved. The fruits are large, of a rich, glossy purplish black color, very handsome and attractive. It is entirely free from spines. Price, pkt. 10c; oz. 35c; postpaid.

IMPROVED NEW YORK PURPLE

(See cut.) Entirely spineless. Low growing plants, stalky and branching, bears early and almost continuously. Fruits are large, satiny smooth and a rich purple color. Price, pkt. 10c; oz. 30c; postpaid.



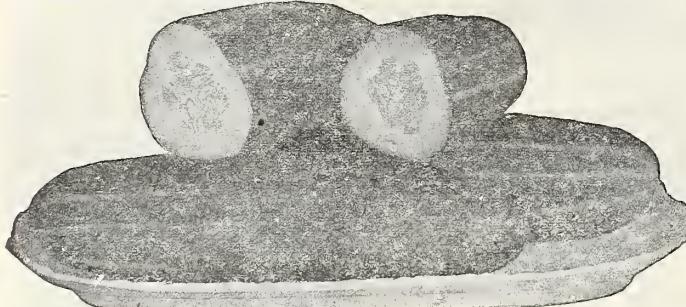
**VEGETABLE PLANTS LISTED ON PAGE 9
FOR QUANTITY PRICES, SEE COLORED SHEET.**

New York Purple

Cucumbers

One ounce to 50 hills; 2 to 3 lbs. to the acre. Earliest varieties ready for table use in 50 to 55 days from seed. Main crop in 65 to 75 days.

As soon as the weather becomes settled and warm, plant in hills 4 to 6 feet apart each way, with 8 or 10 seeds in a hill; cover half an inch deep, smoothing the hill off with the hoe. Keep the soil well stirred, and when the plants are out of danger of insects, leave 3 or 4 plants to a hill. For pickles, plant from first of June to first of August. The fruit should be gathered when large enough, whether required for use or not, as, if left to ripen on the vines, it destroys their productiveness. A few hills for early use may be had by sowing on pieces of sod in a hotbed, and when warm enough transplant to open ground.



Long Green

IMPROVED LONG GREEN

(See cut.) A well known standard, main crop variety, about 9 in. long, of excellent quality, and makes the best of pickles. Vines vigorous and very productive. Price, pkt. 5c; oz. 10c; 1 lb. 80c; postpaid.

IMPROVED EARLY WHITE SPINE

For forcing it is preferred to all others. Flesh tender and crisp. Fruit uniform in size, straight and light green, with a few white spines. Price, pkt. 5c; oz. 10c; 1 lb. 30c; postpaid.

JAPANESE CLIMBING

The vines can be trained to climb, thus requiring less ground space. The cucumbers are thick, tender, and of a delicate flavor, flesh white; skin dark green, turning to brown and netted when ripe. Price, pkt. 5c; oz. 10c; 1 lb. 30c; postpaid.

LEMON CUCUMBERS

A new kind of Cucumber, called the "Lemon." It is similar in color and shape to a lemon—hence its name. Its flavor is delicious and it is never bitter. Excellent for slicing—we know of none equal to it; used in salads and when quite small is often eaten like radishes. Always tender, crisp and juicy. It is deserving of general planting. When ordering your garden seed be sure to include one or two packets. Price, pkt. 10c; oz. 25c; 1 lb. 80c; postpaid.

Ready for table in 43 to 50 days from seed

Endive

One of the best autumn and winter salads. Sow from June until August, $\frac{1}{2}$ inch deep in drills 14 inches apart and thin out to 1 foot apart in rows. When nearly grown, bleach by tying tips of leaves together.

GREEN CURLED, WINTER

Very hardy; leaves dark green and tender. Much better than the common varieties. Prices, pkt. 5c; oz. 20c; 1 lb. 50c; postpaid.

MOSS CURLED

Leaves very finely curled. Price, pkt. 5c; oz. 20c; 1 lb. 50c; postpaid.

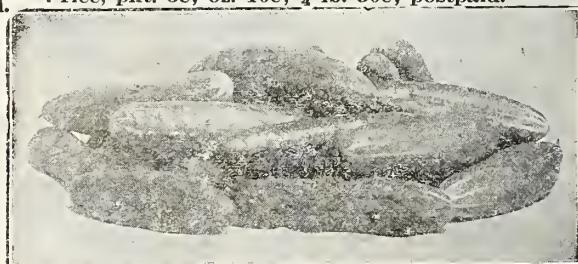
WHITE CURLED

Very tender when cut young; blanches readily. Price, pkt. 5c; oz. 20c; 1 lb. 50c; postpaid.

One ounce to 100 feet of drill

A GOOD SCHEME

Put in a second row of seed a few inches from your first cucumbers when they begin to run. The bugs prefer young plants. Your earliest plants are thus protected and those of later planting that escape the bugs will prolong the pickle season.



Davis New Perfect Cucumber (Field Run)

FOR QUANTITY PRICES, SEE COLORED SHEET.

BOSTON PICKLING or GREEN PROLIFIC

One of the best pickling varieties; dark green, tender, crisp and productive. Price, pkt. 5c; oz. 10c; 1 lb. 25c; postpaid.

DAVIS PERFECT

This cucumber has the merit of being not only a first-class variety for forcing under glass, but is equally as good as out-door culture. The color is a dark, glossy green; in shape it is smooth and symmetrical with an average length of ten to twelve inches. It is very tender and of exceptionally good flavor. For shipping it is unsurpassed. Price, pkt. 5c; oz. 10c; 1 lb. 30c; postpaid.

EARLY CLUSTER

A short pale green variety; fruit borne in clusters near the root, containing few seeds. Price, pkt. 5c; oz. 10c; 1 lb. 30c.

EARLY FRAME or SHORT GREEN

Excellent for table use and for pickling. Fruit straight, smaller at each end; bright green, flesh tender and crisp. Price, pkt. 5c; oz. 10c; 1 lb. 30c; postpaid.

EVERBEARING

Small, very early and productive; solid, few seeds and of fine quality. It continues to bear until frost. Price, pkt. 5c; oz. 10c; 1 lb. 30c; postpaid.

IMPROVED JERSEY PICKLING

A standard small variety, dark green, tender, crisp, productive, of fine flavor and uniform size. Price, pkt. 5c; oz. 10c; 1 lb. 30c; postpaid.

Garden Herbs

Herbs delight in a rich, mellow soil. Those marked with a * are perennial. Sow early in spring in shallow drills, one foot apart; when up a few inches thin out; cut just before they come into full blossom, tie in bunches and hang up or spread thinly.

DILL

Leaves and seed are used in soups, sauces and pickles. It reseeds itself each year. Price, pkt. 5c; oz. 10c; 1 lb. 35c; postpaid.

*LAVENDER

Aromatic, medicinal herb. Price, pkt. 5c; oz. 20c; 1 lb. 75c; postpaid.

MINT

The old fashioned mint has been growing in favor of late years. Used in flavoring meats, etc., also for mint sauce. Easily grown. We offer only roots. Price, per clump, 20c; 2 for 35c; postpaid.

*MAJORAM (Sweet)

Leaves and shoots used for seasoning. Price, pkt. 5c; oz. 20c; 1 lb. 75c; postpaid.

*SAGE

Most useful herb for seasoning. Price pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

SUMMER SAVORY

Used for flavoring soups. Price, pkt. 5c; oz. 15c; 1 lb. 75c; postpaid.

*THYME

For medicinal use. Price, pkt., 5c; oz., 50c; 1 lb., \$1.50; postpaid.

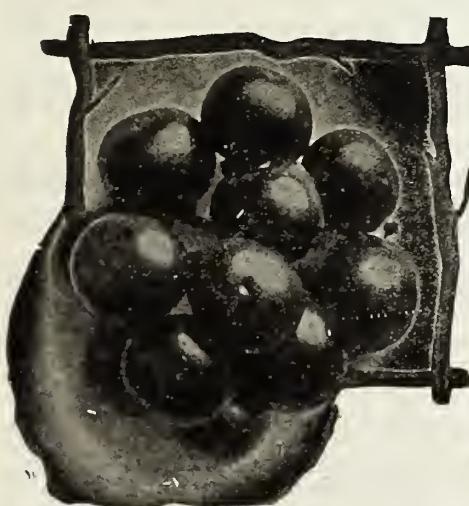


Leek

LEEK. (American Flag.) The Leek is a very hardy plant with a sweet onion-like flavor. It does not make bulbs, but the plant has a long, thick neck somewhat resembling the young growth of the onion in the spring. These necks or stems are blanched in the fall by drawing the earth up about them as the plants increase in growth; or they may be taken up and set in trenches in the same manner as celery for blanching. The flavor is greatly improved by freezing, and the large stems can be kept in excellent condition until well on in the spring. One ounce will plant 100 feet of row. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

Finocchio

FLORENCE FENNEL. A delicious vegetable which should be more largely grown in this country. It is extensively used in Italy as a salad, and also may be served boiled. When the enlargement of leaf stalk, at base of stem, is about the size of a hen's egg it should be earthed up so as to cover half of it and in about 10 days cutting may be commenced and continued as the plants increase in growth. The flavor is somewhat like celery but it has a sweet taste and delicate odor. Pkt. 10c; oz., 40c; 1 lb., \$1.25; postpaid.



Garden Huckleberry

Garlic

The sets should be planted in spring. Cultivate same as onions. Sets, per oz. 5c; 1 lb., 20c; lb., 60c; postpaid.

Garden Huckleberry

New Heavy Yielding Garden Berry

This new fruit can be grown from the seed the first year, and produces fruit as large as a grape; the color is jet black, and when cooked can scarcely be discerned from the real huckleberry. Plant and cultivate same as tomatoes. Do not eat green. Berries make splendid pies, jelly and sauce. Parboil a few minutes in soda water, using about one teaspoonful of soda to 1 lb. of fruit. After pouring off this water add sugar and cook slowly for several hours; a little vinegar or lemon juice improves the flavor. Very desirable while waiting for several years for hardy fruits to come into bearing, or in dry climates where the ordinary small fruits do not succeed. Pkt. 5c; oz. 25c; postpaid.

The **BEE SUPPLY DEPARTMENT** we recently added has proven a big success. We carry a full line of **A. I. Root's Bee Supplies** which have given the best of satisfaction. A full list of supplies on page 106-114.

HOW TO MAKE 25c IN FIVE MINUTES—Page 21.

FOR QUANTITY PRICE, SEE COLORED SHEET.



Dwarf German Kale

Kohlrabi

One ounce to 300 feet of drill, and makes 3,000 plants

A vegetable intermediate between the cabbage and turnip. The edible bulb is served like turnip. Sow from May to July in rows 18 inches apart, and thin. Cultivate the same as cabbage.

EARLIEST SHORT-LEAVED WHITE VIENNA FORCING

This variety is especially adapted for early work and forcing; delicate flavor, flesh white and very tender. Pkt. 5c; oz., 25c; 1 lb. 85c; postpaid.

EARLY WHITE VIENNA

A favorite sort; flesh white and tender. Pkt. 5c; oz., 20c; 1 lb. 85c; postpaid.

EARLY PURPLE

Purple outside with white flesh. Pkt. 5c; oz., 20c; 1 lb. 85c; lb. \$2.50; postpaid.

Horseradish

This splendid appetizer cannot be over-estimated. 25 plants are sufficient for a family. The roots grow and increase rapidly in size with each succeeding year. Plant in a corner of the yard where you wish it to grow and you can begin digging the next year. Postpaid, 40c doz.; not postpaid, 30c doz.

Lentils

A leguminous annual, resembling peas, with round, flat seeds, which are much used for soup and making a delicious dish; they are also splendid for pigeon feed. The stems and leaves make good fodder. Succeds well on dry soil. Pkt. 10c; lb. 50c; postpaid. By express 5 lbs. \$2.00.

Mustard

When young, the leaves are used for salad, which although slightly pungent, is very appetizing. Mustard may also be cooked like Spinach and will make a very wholesome and delicious food. Sow early in the spring in shallow drills. One ounce will sow 50 feet of drill.

CHINESE

The immense leaves grow rapidly, and can be cut frequently until killed by frost. Leaves are eated boiled, like Spinach. Price, pkt. 5c; oz., 10c; 1 lb. 25c; lb. 75c; postpaid.

MAMMOTH SOUTHERN CURLED

The large curled-leaf variety, popular in the South, where the seed is sown in the fall for spring use. Price pkt. 5c; oz., 10c; 1 lb. 25c; lb. 75c; postpaid.

WHITE

A small pungent salad; the seed is also used for flavoring pickles, etc. Price, pkt., 5c; oz., 10c; 1 lb., 20c; lb., 65c; postpaid.

Mushroom Spawn

The Mushroom is a delicious edible fungus of which there are numerous varieties. We handle the ordinary commercial variety of a creamy white color with loose gills which underneath are of pinkish-red, changing to liver color. These can be grown in a warm cellar or enclosed shed in which an even temperature can be maintained of fifty or sixty degrees and where a plentiful supply of fresh horse manure for making the bed can be obtained.

AMERICAN (Pure Culture Spawn).

Produced by the new grafting process, from selected and most prolific varieties, has never failed to run. Price per brick (enough for 8 square feet), 35c; 5 for \$1.50, by mail, postpaid. By express, at buyer's expense, per brick, 25c; 6 bricks, \$1.40; 12 bricks, \$2.75.



MUSHROOM CULTURE

A most practical work on the growing of Mushrooms. Describes how they may be grown with profit by market gardeners, and also how to grow them for home use. Illustrated 32 pages. Price, 35c; postpaid.

FOR QUANTITY PRICE, SEE COLORED SHEET.

Lettuce

One ounce to 400 feet of drill. Ready for use in 3 or 4 weeks; marketable size 60 to 75 days from seed
 Lettuce thrives best in light, very rich, moist soil, but does well in common garden soil enriched with rotten manure. For first crop sow in gentle heat in February, and transplant to 10 inches apart. It may be sown thickly and cut when plants are very young. For a summer supply sow thinly in shallow drills in a cool, partially shaded place, in rich soil, and thin to a foot apart.

Cabbage or Heading Varieties

The best results with head or cabbage sorts is only obtained when the plants are transplanted several times.

BIG BOSTON

A large heading, forcing sort, very hardy and vigorous, with broad, comparatively smooth, thin and very hard, bright green leaves. Quite tender. Indoors this forms a solid head, while outside it is less distinctively a heading sort. Pkt., 5c; oz., 15c; 1 lb., 45c; postpaid.

ICEBERG

Makes a large, handsome, crisp head, conical in shape, tightly folded and well blanched; outer leaves fringed. Very highly esteemed for its beautiful appearance and mild flavor, even during hot summer months. Price, pkt. 5c; oz. 10c; 1 lb., 40c; postpaid.

Curled or Loose Leaf Varieties

BLACK SEEDED SIMPSON

The leaves are large and form a compact mass. They are thin, tender and of a very light green color. Well adapted for growing under glass or for very early spring use. Price, pkt. 5c; oz. 10c; 1 lb., 40c; postpaid.

EARLY PRIZE HEAD

Forms a mammoth plant, in which even the outer leaves are crisp and tender; color bright green tinged with brownish red. It is of superb flavor and very hardy. Price, pkt., 5c; oz., 10c; 1 lb., 40c; postpaid.

EARLY CURLED SILESIA

An early, erect growing and loose heading lettuce, especially adapted for out door planting, and can be used when very young. Exceedingly

HANSON

Forms a large, flat head, resembling that of cabbage and so slow to form a seed stalk that it often fails to seed at all. Very tender and sweet. A standard summer heading Lettuce. Price, pkt. 5c; oz., 10c; 1 lb., 40c; postpaid.

DENVER MARKET

An early variety of Head Lettuce, either for forcing or open ground. It forms large heads, of good light green color. The leaves are blistered (like the Savoy Cabbage), very crisp and tender. Price, pkt. 5c; oz., 10c; 1 lb., 40c; postpaid.

CALIFORNIA CREAM BUTTER

Forms round, crisp, solid heads, of buttery flavor, medium early. One of the best summer varieties of head Lettuce. Pkt., 5c; oz., 15c; 1 lb., 40c; postpaid.

sweet and well flavored. Price, pkt. 5c; oz., 10c; 1 lb., 40c postpaid.

SIMPSON'S EARLY CURLED

Leaves broad, frilled and blistered. Light green, sweet, tender, and well flavored. An early, erect growing sort. Price, pkt., 5c; oz., 10c; 1 lb., 40c postpaid.

GRAND RAPIDS

As a lettuce for greenhouse forcing, this variety undoubtedly stands at the head of the list, being of quick growth, little liable to rot and standing for some days after being fit to cut. The plant is upright and forms a loose cluster of large, light leaves. It is also excellent for out door planting. Price, pkt., 5c; oz., 10c; 1 lb., 40c postpaid.



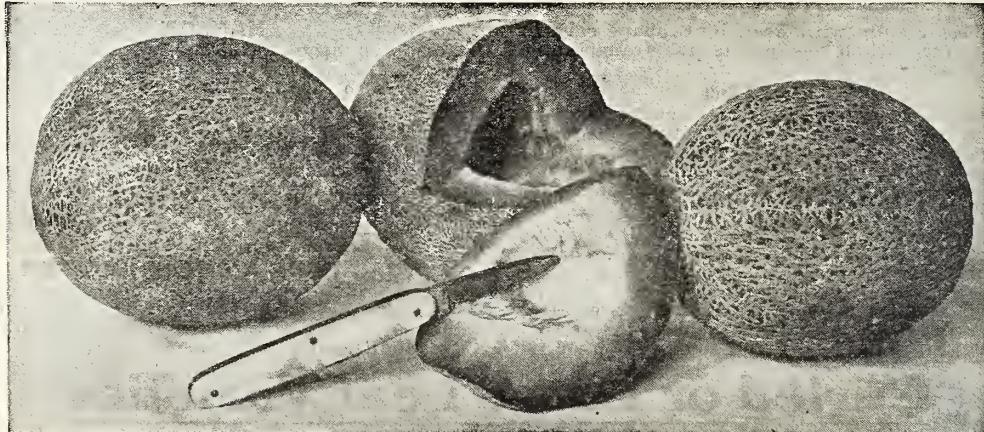
Grand Rapids

TO MAKE A HOTBED, SEE PAGE 23.
 FOR QUANTITY PRICE, SEE COLORED SHEET.

Musk Melons

One ounce to 50 hills; 2 to 3 pounds per acre. Earliest varieties ready in 90 to 100 days from sowing. General crop requires 115 to 140 days.

Melons thrive best in a light, rich soil. Plant when the ground has become warm and dry, and danger from frost is past, in hills 6 feet apart each way in well enriched soil 12 to 15 seeds in each hill. After all danger of bugs is over thin out to 3 plants per hill. When about three feet long, pinch off the tips to make them branch, and the fruit matures earlier. G. Green Flesh. S. Salmon Colored Flesh. Y. Yellow Flesh.



Osage or Miller's Cream

EMERALD GEM

S. Where an extra melon for home use is wanted nothing can equal this superb sort. Of medium size, outside skin emerald green and smooth. Ripens clear through to rind, which is very thin. Flesh is thick and juicy, of nice salmon color; for sweetness and rich, aromatic flavor it is unequalled. A prolific bearer and just the melon for the small grower. Price, pkt. 5c; oz., 10c; 1 lb., 35c; 1b., \$1.25; postpaid.

NUTMEG

G. Fruits round, seven inches in diameter, slightly flattened at the ends. Well ribbed and heavily netted; thick pale-green flesh, sweet and melting. Price, pkt. 5c; oz., 10c; 1 lb., 35c; 1b., \$1.00 postpaid.

ROBINSON'S DELICIOUS GOLD LINED ROCKY FORD CANTALOUE

This strain of the Eden Gem type is the result of several years' selection by one of the most progressive farmers of Rocky Ford, Colo. Its shape is ideal, very slightly oval, no ribs and it is heavily netted over the entire melon. It is thick meated,

fine grained and sweet; color green with a gold margin next to the seed cavity. Price, pkt., 10c; oz., 20c; 1 lb., 65c; 1b., \$2.00, postpaid.

SANTA CLAUS MELON

Just think of having a melon to eat with your Christmas dinner! But this is what is claimed by the originator of this wonderful novelty. There is no seed cavity. The seeds are embedded in a jelly-like pulp. The light green flesh is absolutely stringless; its flavor excels anything in the melon line; it is in a class by itself and is beyond description. When first taken from the vine the rind is crisp and very hard; after four or five weeks there is less crispness to the touch and a slight giving way to pressure. This melon should become more popular than the Rocky Ford, because it is more delicious and it is a Christmas melon. Price per pkt. 10c; oz., 20c; postpaid.

HOODOO

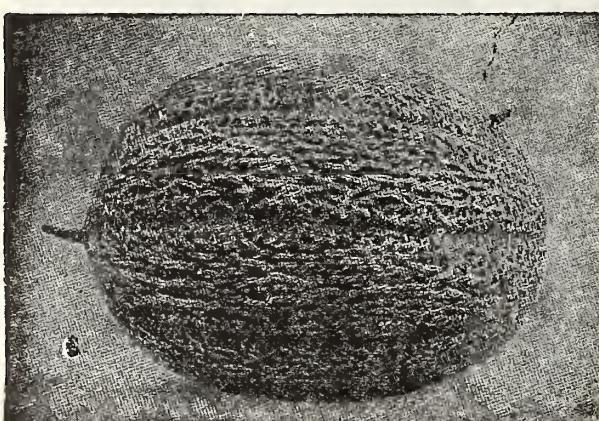
S. A new early orange flesh variety of oval shape and uniform in size. The flesh is very thick of fine grain and sweetest flavor; a heavy yielder. Somewhat resembles Rocky Ford. Splendid shape for serving in halves. The rind being tough, makes it a good shipper. Price, pkt., 5c; oz. 15c; 1 lb., 50c; postpaid.

OSAGE or MILLER'S CREAM

S. A standard sort, medium size, oval, dark green, netted, and slightly ribbed. The flesh is thick, and firm, rich salmon, highly flavored and delicious to the rind. Price, pkt., 5c; oz., 10c; 1 lb., 35c; 1b., \$1.25; postpaid.

ROCKY FORD

G. This variety, well shown by our illustration, has everywhere been in great demand by the high-class hotels and restaurants. Hundreds of carloads have been shipped from the little town of Rocky Ford, Colo., to the large cities, taking the place of other varieties. Of just the right size for table use, slightly oval in shape, flesh thick, of light green color, and fine, juicy, luscious flavor. Very early and wonderfully productive. Price pkt., 5c; oz., 15c; 1 lb., 40c; 1b., \$1.25; postpaid.



Rocky Ford

FOR QUANTITY PRICE, SEE COLORED SHEET.

Musk Melons—Continued

CHICAGO MARKET.

G. This we consider the best Nutmeg for earliness of maturity, large and uniform size, thickly netted skin, small seed cavity, deep green flesh, juicy, delicious flavor and free from rot. A favorite with all who prefer a green flesh sort. Price, 5c; oz. 10e; 1 lb. 30c; lb. \$1.00; postpaid.

EDEN GEM or NETTED ROCKY FORD CANTALOUE.

G. This magnificent new musk melon is a selection of the old Rocky Ford, which it completely surpasses in lusciousness, yield, carrying, and good selling qualities. In shape, it is somewhat longer and a trifle larger and closer and deeper netted. Price, pkt. 5c; oz. 15c; 1 lb. 50c; lb. \$1.50 postpaid.

BANANA CANTALOUE

S. The melons grow 24 to 30 inches long; stand summer sun as no other cantaloupe will and continue to bear until late in the season. The salmon-colored flesh is thick and of delicious banana-like flavor. Price, pkt. 5c; oz. 15c; 1 lb. 50c; lb. \$1.50; postpaid.

BURRELL'S GEM

S. Very much like Rocky Ford, but has orange colored flesh. The flesh is fine grained and spicy. It is a good keeper. Fruits large and somewhat elongated. Price, pkt. 5c; oz. 10e; 1 lb. 35c; lb. \$1.00; postpaid.

PAUL ROSE or PETROSKY.

S. It is an ideal melon, form oval, about 5 inches in diameter. It has the flesh color and quality of Osage with a flavor entirely its own. It has no equal as a market melon for professional growers, as it does not break down in shipping. Its fine flavor, rich quality, netted skin and basket packing size makes it a winner. Price, pkt. 5c; oz. 10e; 1 lb. 30c; lb. \$1.00; postpaid.

EXTRA EARLY HACKENSACK.

G. Ten days earlier than Hackensack. Melons weigh 4 to 10 lbs. each. This is one of the best, earliest, hardiest, most prolific of netted melons. Fine flavor. Price, pkt. 5c; oz. 10e; 1 lb. 35c; lb. \$1.00; postpaid.

HACKENSACK

G. A popular variety of large size. It is round in shape, flattened at both ends, of most delicious flavor and wonderfully productive. Flesh green. Price, pkt. 5c; oz. 10e; 1 lb. 35c; lb. \$1.00; postpaid.

VINE PEACH

S. The fruit is a bright orange color, oval-shaped and about the size of an ordinary peach, which it resembles very much. These melons are not eaten raw unless when dead ripe, but are unequalled for pies, preserves or sweet pickles. Price, pkt. 5c; oz. 10e; 1 lb. 40c; lb. \$1.50; postpaid.

Free! 25c Coupon 25c Free!

WE WOULD LIKE VERY MUCH TO HEAR FROM OUR CUSTOMERS JUST WHAT SUCCESS YOU HAVE HAD WITH OUR SEEDS THIS PAST SEASON, AND IF THERE IS ANY PARTICULAR ARTICLE THAT YOU HAD EXTRA SUCCESS WITH, WE WOULD BE VERY GLAD INDEED TO HAVE YOU WRITE US, STATING THE CONDITIONS UNDER WHICH IT WAS GROWN, ETC.

WE WANT TO BECOME BETTER ACQUAINTED WITH THE SEED BUYERS THROUGHOUT THE COUNTRY. OF COURSE, THERE ARE SOME WHO DO NOT KNOW OF US OR AT LEAST DO NOT GET OUR CATALOG AND THESE WE WANT TO BECOME BETTER ACQUAINTED WITH.

IT IS EXPENSIVE TO ADVERTISE, NO MATTER HOW IT IS DONE, AND YOU MIGHT AS WELL RECEIVE THE BENEFIT OF THIS COST TO US, AND SO IF YOU WILL FILL IN THE LINES BELOW WITH THE NAMES AND ADDRESSES OF FIVE FRIENDS WHOM YOU THINK ARE INTERESTED IN GOOD SEEDS AND WOULD LIKE OUR CATALOG BUT DO NOT GET IT, WE WILL GIVE YOU FIVE OF ANY OF THE 5c PACKAGES OF GARDEN OR FLOWER SEED LISTED IN OUR CATALOG, YOUR SELECTION, ABSOLUTELY FREE POSTPAID, IF SENT IN WITH AN ORDER AMOUNTING TO 50c.

Name	Town.....	State.....
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After filling in the above lines write your name and address here:

Cut out and return to us.

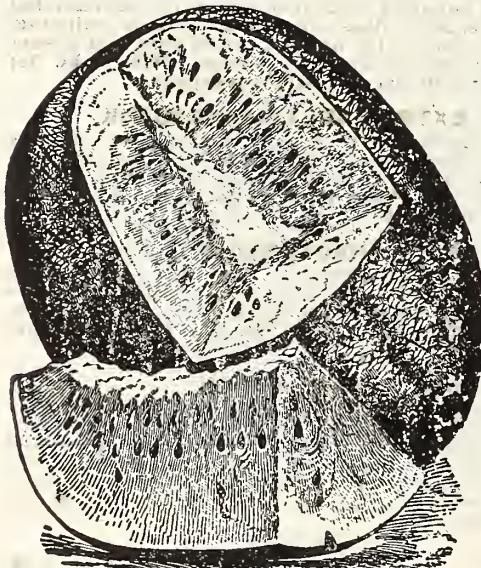
NOTICE—Before sending your order, look over the index as you will, no doubt, find something else you want. When sending your seed order include a few plants, poultry and bee supplies, insecticides, etc. Thus you will save time and express charges.

FOR QUANTITY PRICE, SEE COLORED SHEET.

Watermelons

Ready from 90 to 140 days from seed. One ounce to 30 hills; 4 lbs. per acre.

To get good strong vines early in the season, make large, well drained hills of earth, made very rich, about eight feet apart. In these plant the seed as soon as the ground is warm and dry, and carefully protect the young plants from insects, and hasten their growth by the use of liquid manure. ls, light seed; ds, dark seed.



Sweet Heart

SWEET HEART

ds. Vine vigorous and productive, ripening its fruit early; fruit large, oval, very heavy, uniformly mottled. Green and light green; rind thin, but firm; flesh bright red, firm and solid but very melting and sweet. The melons retain their good quality for a long time. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c; postpaid.

ALABAMA SWEET

ls. This is a large oblong melon; color, dark green with faint lighter stripes. Being of good size though not ungainly, it is first class for shipping purposes. Its flavor is simply delicious, it is entirely stringless. We can not recommend it too strongly. Rind thin but very tough; flesh bright red, fine grained and sweet. Fruits average a little thicker than Florida Favorite. Seed white. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 85c; postpaid.

THE DIXIE

ds. This watermelon is the best shipping melon grown, being even larger, earlier and far more productive than the Kolb's Gem, which has heretofore been considered the best melon for shipping. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 85c; postpaid.

ICE CREAM (Peerless)

ls. It is medium in size, almost round; the skin is pale green; slightly mottled; flesh bright scarlet, solid to the center; sweet; melting and delicious. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 85c; postpaid.

MCIVER'S WONDERFUL SUGAR

ls. The melons attain a great weight, are of a very handsome appearance, never crack or lose their fine flavor. It is a very productive and hardy variety and one that will take the lead wherever known. Oblong; striped skin. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 85c; postpaid.

BLACK BOULDER
ds. It is enormously productive, nearly round in shape, reaching a mammoth size, with rich dark green skin; flavor equal to any melon, and shipping qualities excellent. Price, pkt. 5c; oz. 10c; ¼ lb. 35c; lb. 80c; postpaid.

COLORADO PRESERVING CITRON

ds. This is a large fruiting strain of citron for preserving. Flesh clear white and very solid. Green seed. Price, pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00; postpaid.

CUBAN QUEEN

ds. One of the latest varieties, skin striped dark and light green; heavy cropper; flesh bright red, luscious, crisp, sugary. A favorite melon for home and market. One of the best keepers, and a first rate shipper. Price pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c; postpaid.

DUKE JONES (Jumbo.)

ls. Very large, nearly round, dark green; flesh solid, deep red, and of fine quality. Very productive. A good shipper. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c; postpaid.

FLORIDA FAVORITE

ls. A splendid melon of very large size and excellent quality. Fruits long, dark green, mottled and striped with lighter shade; rind thin but firm. Flesh very bright, deep red, very sweet and tender. Vines vigorous and productive. Seed white. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c; postpaid.

GYPSY or GEORGIA RATTLESNAKE

ls. One of the largest, oldest and most popular sorts, especially in the South. Fruit very long, of light green color, distinctly striped and blotched with a darker shade. Flesh bright scarlet, very sweet and tender. Vines large and vigorous. Seed nearly white. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c; postpaid.

HALBERT'S HONEY

ls. A splendid sort for home use or local market. Vine vigorous and productive; fruit large and oblong; color dark glossy green; flesh very bright, rich red, and exceedingly sweet, extending close to rind, too crisp and brittle to be a good shipper. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 85c; postpaid.



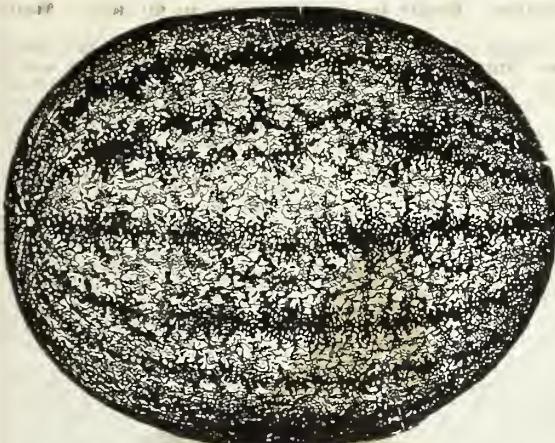
Tom Watson

TOM WATSON

ds. The Tom Watson melon has in a few years become one of the most popular of all shipping melons. The fruits are similar in shape, color and splendid quality to the Kleckley Sweets, but average larger in size and have a tougher rind, making them especially adapted for shipping. They ripen but a few days later than the Kleckley Sweets. It is one of the very best melons to grow for the market and will command highest prices. Price, pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 85c; postpaid.

FOR QUANTITY PRICE, SEE COLORED SHEET.

Water Melons—Continued



Cole's Early

PHINNEY'S EARLY

Very early, quality good; hardy. Bears abundantly, medium sized, oblong melons with thin, smooth rind; flesh pink and tender. Price, pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 85c; postpaid.

KLECKLEY'S SWEETS. (Monte Cristo.)

1s. Large oblong melon, skin dark green. The rind is only about $\frac{1}{2}$ inch in thickness. The scarlet flesh is sweet and sugary and is of such texture that it leaves no strings of pulp in eating. The melon is better for home use than for shipping, and we believe it is the best table melon today. Price, pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 90c; postpaid.

Collection No. 2

7 BEST LINCOLN BRAND MELONS 25c POSTPAID

This collection will furnish an ordinary sized family plenty of first class Water Melons and Musk Melons all season. It includes one 5c packet of Emerald Gem, Rocky Ford, Paul Rose and Osage Musk Melons. These ripen successively in the order named, also one 5c packet of three of the very best Water Melons in existence, Tom Watson, Kleckley Sweets and Sweet Heart. We will send this collection postpaid to any address for 25c.

COLE'S EARLY

This is a very choice melon for the home garden and can be grown farther north than any other variety. The flesh is bright red, crisp and very delicate in texture; sweet and refreshing in flavor. It is an abundant bearer, of medium size fruit, and very solid with thin rind. Price, pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb. 85c; postpaid.

KENTUCKY WONDER

One just cause for criticism of many of the new melons is that, for the most part, they have been, at the best, slightly improved strains of some old and well known sort. This cannot be said of Kentucky Wonder. It is distinct, and the melon itself proves it. In shape it is oblong, attaining a good size; skin dark green and beautifully marked. Flesh a beautiful rich scarlet color, crisp, rich, sugary, always firm and solid, never mealy or tough. Large. Price, pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 85c; postpaid.

KOLB'S GEM.

For many years a favorite sort among Northern market growers. On account of its excellent shipping qualities is extensively grown for that purpose. Nearly round; color a dark green with lighter narrow strips. Very thin rind; flesh bright red, good flavor. Our seed is choice. Price, pkt. 5c; oz. 1c; $\frac{1}{4}$ lb. 25c; lb. 85c; postpaid.

MOUNTAIN SWEET

The old standard still quite popular in the North, where the large fruited Southern sorts do not ripen. Early, fruit large, oval, rind dark green, flesh scarlet. Price pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 85c; postpaid.



Kolb's Gem

To Make a Hotbed

A hotbed should face the south or southeast, be located on well drained ground and if possible be protected on the north by a building or high fence.

6x10 feet will be large enough for an acre of garden. Sashes are usually 3x6 feet. Dig a trench 2 feet deep, around this place a frame 16 inches high at the back and 8 inches in front. Fill the hole with fresh horse manure that has lain for a week or ten days, tramping it down firmly and covering with 4 inches of fine, rich, black soil. Place the sashes over the frame. After standing a few days lift the sashes to allow the rank heat and steam to pass off; when the temperature has subsided to 90 degrees F. sow the seed. It is best to bank the outside of the frame up to the sash.

The hotbed may be all above ground by making a pile of manure 2 feet high, and 3 feet longer, and 2 feet wider than the frame, fill in with black soil and complete as directed for the excavated bed.

When plants are nearly ready for outside lift the sashes every pleasant day, gradually hardening off the seedlings.

Frame and sash should be stored away at the close of the season and will thus last for years.

**A 25 CENT COUPON FREE. SEE PAGE 21.
FOR QUANTITY PRICE, SEE COLORED SHEET.**

Onions

One ounce to 300 feet of drill; 4 to 5 lbs. to the acre. Ready for green onions in 60 days. Main crop matures in 130 to 190 days from sowing.

The onion is most successfully grown in a rich, sandy loam. Continued cultivation upon the same plot of ground contrary to the general rule, rather improves the crop than otherwise. As early as the ground can be worked in the spring, sow the seeds in drills 14 inches apart, covering half an inch. When plants can just be seen in the rows, commence hoeing, skimming the surface. Subsequently weed thoroughly and carefully by hand. When tops die, pull onions and spread evenly over the ground; stir or turn until thoroughly dried, then cut the tops off $\frac{1}{2}$ inch from the bulb.



Southport Yellow Globe

Yellow Globe Danvers

AUSTRALIAN BROWN

Distinct from all others; is nearly round, wonderfully hard and solid; ripens extremely early; never makes scullions; of medium size, skin a deep amber brown, flesh mild and agreeable. No other onion has such keeping qualities. Price, pkt. 5c; oz. 30c; 1 lb. \$1.00; postpaid.

EXTRA EARLY RED FLAT

Matures very early, yields abundantly, and is of mild flavor; medium size; deep red and solid. Price, pkt. 5c; oz. 30c; 1 lb. \$1.00; postpaid.

MAMMOTH PRIZE TAKER

One of the largest, handsomest, finest flavored, and in every way a choice variety of yellow onion, having been grown to enormous weight of over 6 lbs. Of a clear, bright straw color, and uniform, perfect globe shape. Produces enormous crops, brings an extra price, being sold on the market as fancy onions. Keep wonderfully well. It is unexcelled, ripens up hard and firm, and presents the handsomest possible appearance in market, while the pure white flesh is fine grained, mild and delicate in flavor. Price, 5c; oz 40c; 1 lb. \$1.00; postpaid.

MAMMOTH SILVER KING

Averages 15 to 22 inches in circumference and weigh $2\frac{1}{2}$ lbs. each. Matures early and is uniformly large and of good shape, is flat but thick. Skin is clear silver white, flesh snowy white, tender, sweet and mild. Size, shape, color, quality all make it ideal for exhibition, fancy market or table. Price, pkt. 10c; oz. 50c; 1 lb. \$1.50 postpaid.

SOUTHPORT YELLOW GLOBE

Conspicuous, large, golden yellow spheres, of exceptional beauty; a late, large, main crop variety; best keeping quality. The buyer of a packet and the planter for carload shipments are equally enthusiastic over this gem among onions. Sacked or barreled for market. Its size, beauty, quality and fine appearance make it a trade winner. Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.

WHITE PORTUGAL or SILVER SKIN

Standard white variety for general culture. Bulbs grow to good size, ripening early and quite evenly. A good keeper. Flesh is very mild and sweet; the skin is clear silvery white, of very handsome appearance. Price, pkt. 10c; oz. 50c; 1 lb. \$1.50; postpaid.

WHITE QUEEN

This is the best of all for small pickles and the earliest ripening onion in cultivation. The bulbs, of a pure paper-white, are generally very small, averaging only one and one-half inches in diameter, and are most mild in flavor. Price, pkt. 10c; oz. 40c; 1 lb. \$1.50; postpaid.

YELLOW GLOBE DANVERS

A fine productive variety, of medium size, skin coppery yellow, flesh white, comparatively mild and well flavored. Best of keepers. Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.

FOR BEE SUPPLIES, SEE PAGES 106-114

FOR QUANTITY PRICE, SEE COLORED SHEET.

Onions—Continued

GLOBE WETHERSFIELD, RED

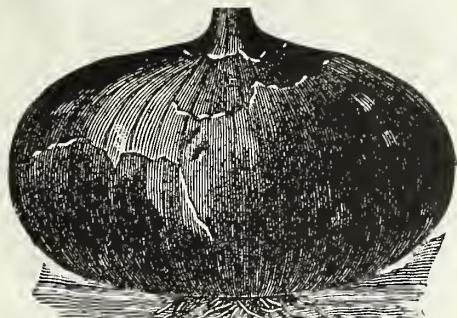
Remarkable for size, earliness, productiveness, beauty of color, perfection of shape, and long keeping qualities. Possesses all the excellent qualities of Red Wethersfield and Yellow Globe Danvers Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.

LARGE RED WETHERSFIELD

This is the standard and favorite variety. Large size, deep, purplish white, stronger flavored than large varieties. Very productive and an excellent keeper. Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.

RED BERMUDA

Bulbs of this variety are similar in form and early ripening to the Bermuda White but grow large in size, ranging from three to four inches larger in diameter; very flat and of a light pink color. The flesh is white, slightly suffused with pink. Price, pkt. 10c; oz. 45c; 1 lb. \$1.25; postpaid.



Red Wethersfield

SOUTHPORT LARGE RED GLOBE

The handsomest and most richly colored of all red onions. Are remarkably uniform in size. The extra dark rich coloring makes a most attractive appearance when prepared for market. The plants are thin-necked, ripening down to a hard solid ball—insuring the largest percentage of market onions and the best keeping qualities. Flesh fine grained, milk and tender. Price, pkt., 10c; oz., 50c; 1 lb., \$1.25; postpaid.

SOUTHPORT WHITE GLOBE

Of all our American varieties of market onions, this generally commands the highest price. Of true globe form, the onions are two or two and a half inches in diameter, with a thin, delicate skin of purest paper whiteness. The flesh is crisp, fine grained, snowy white in color and very mild flavor. Price, pkt. 10c; oz. 50c; 1 lb. \$1.50; postpaid.

WHITE BERMUDA

The bulbs are quite broad and flat in form. The color is not a clear white, as in our American varieties, but rather a pale straw; fresh crisp, solid and mild in flavor and early ripening. Price, pkt. 10c; oz. 50c; 1 lb. \$1.25; postpaid.

Onion Sets

Egyptian Winter or Red Perennial

A hardy onion for September and October planting. Orders booked now. Entirely distinct from all other varieties of onion; being perfectly hardy everywhere. They should be planted in the fall and left in the ground all winter. These sets never form large bulbs but produce the earliest, small, green onions, ready for home or market use weeks ahead of any other sort, unsurpassed in sweetness and tenderness. It is best to replant every autumn and use both roots and tops the following spring. Slight winter protection is required, just a few inches of coarse litter spread on the crowns after the ground freezes to prevent root heaving. Orders sent before fall will be filled in September. Price, pt. 20c; qt. 35c; 2 qts. 60c; postpaid.

PRICES—Postpaid

Red Bottoms	\$0.20 pt.	\$0.35 qt.
Yellow Bottoms .....	.20 pt.	.35 qt.
White Bottoms .....	.30 pt.	.40 qt.
Winter Tops .....	.20 pt.	.35 qt.

Write us for prices on onion sets in larger lots

Okra or Gumbo

One ounce to 40 feet of drill. Ready for table in from 90 to 105 days.

The pods when young are used in soups, stews, etc. The plants are of the easiest culture. Sow at the usual time for all tender vegetables, in drills two inches deep, setting the plants 2 feet apart.

IMPROVED DWARF

An early variety, pods comparatively short but very numerous. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

WHITE VELVET

Pods round, smooth, large and attractive; produced in great abundance. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.



White Velvet

GET YOUR GARDEN SEEDS CHEAP, SEE PAGES 21 AND 38



McCleans Little Gem

***LITTLE MARVEL**

An extremely valuable variety, especially suited to small home gardens and is also a splendid variety for early market gardening. The vines grow about 15 to 18 inches in height. The pods are dark green, fair sized, produced in pairs and are closely filled with seven to eight peas of extra fine flavor. Price, pkt. 10c; lb. 30c; postpaid.

***MCLEAN'S LITTLE GEM**

1 foot. An early dwarf, green wrinkled pea, of superior flavor and very prolific. Price, pkt. 5c; lb. 30c; postpaid.

EARLY DWARF

This is one of the newest early dwarf peas. Similar to Sutton's Excelsior except has a dark pod; very sweet and very productive. Height 1 ft. Price, Pkt. 10c; lb. 35c; postpaid.

***DUCHESS OF YORK**

A very fine large, sweet pea, maturing very closely with Gradius, but much more productive. Pods large, dark green, pointed and well filled. H. 3 ft. Price pkt. 5c; lb. 35c; postpaid.

MAMMOTH PODDED EXTRA EARLY

On the order of Rice's Extra Early, but pods one-fourth larger. Matures practically with Extra Early and much more productive; seed large, smooth, white. Bound to take first place as a leading market gardener's first early pea. Height 3 feet. Price, pkt. 5c, lb. 35c; postpaid.

Peas

One quart to 100 feet of drill. $1\frac{1}{2}$ bushels per acre.

For the first early peas, sow in light, rich soil, as early in March or April, as the ground can be worked for later varieties, sow in April or May. Discontinue sowing from June to August, after which, by sowing an extra early sort, a good crop can generally be secured. As Peas suffer considerably from drought during the hot summer months, it will be found of great benefit to sow the Peas in a trench six inches in depth covering the Peas to a depth of two inches. As soon as sufficient growth has been made draw the earth about the vines. In this way a great deal more moisture is kept about the roots than if sown on the level and afterwards hilled up. The wrinkled varieties are not so hardy as the smooth sorts and should be planted later, owing to their liability to rot in the ground, but are much superior in flavor to the smooth Peas. Dwarf varieties sow in rows 1 foot apart, and taller sorts from 2 to 3 feet apart. Those marked thus * are wrinkled and sweet.

Extra Early Varieties**ALASKA**

2 feet. The earliest blue pea, of good flavor, dark green pods, well filled and ripen uniformly. One of the very best for market gardeners. Price, pkt. 5c; lb. 30c; postpaid.

***AMERICAN WONDER**

1 foot. Of the finest quality. Very prolific, with pods of fine size and form; requires no brush or support. It may be planted a week apart for succession. Price, pkt. 5c; lb. 30c; postpaid.

TOM THUMB

9 inch. A smooth, white sort, very dwarf. Price pkt. 5c; lb. 30c, postpaid.

***NOTT'S EXCELSIOR**

1 foot. Earliest wrinkled pea; of close, compact, dwarf growth. The pods average 3 inches in length, and are well filled to the squared ends with large peas, unusually sweet. It not only yields heavily in pods, but also in shelled peas. Price, pkt. 5c; lb. 30c; postpaid.

FIRST AND BEST

Height 2 $\frac{1}{2}$ to 3 feet. Standard, white seeded extra early. Vines are vigorous and hardy, bearing from three to seven pods, containing from 5 to 7 peas of good quality. Price, pkt. 5c; postpaid. lb. 30c.

**INCREASE
YOUR
CROPS.
USE INOCU-
LATING
BACTERIA.
Page 45**

FOR QUANTITY PRICE, SEE COLORED SHEET.

Peas—Continued

SECOND EARLY

ABUNDANCE

Height, 2 to 2½ feet. Seed green, wrinkled. This is a heavy yielding variety and is a capital sort for family use, possesses great sweetness and fine table qualities. The pods are round, 3 to 3½ inches long and well filled with from 6 to 8 peas. It stands fit for use a long time. Price, pkt. 5c; lb. 30c; postpaid.

*ADVANCE

2½ feet. Long pods which are abundantly produced, and well filled to the end; of excellent flavor. A first-class pea in every respect. Price, pkt. 5c; lb. 30c; postpaid.

*EVERBEARING

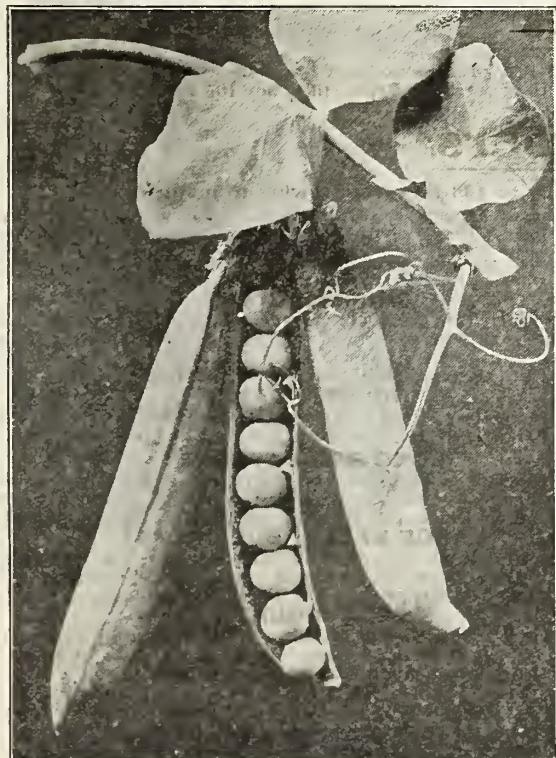
2 feet. Peas are very large, of excellent quality. For continuance and profusion of bearing, this variety is unexcelled, which gives especial value for the late summer and autumn use. Price, pkt. 5c; lb. 30c; postpaid.

*HOSFORD'S MARKET GARDEN

2 feet. A great favorite with the market gardeners. Pods are large, well filled with large peas of a delicious sweet flavor. A prolific bearer. Price, pkt. 5c; lb. 30c; postpaid.

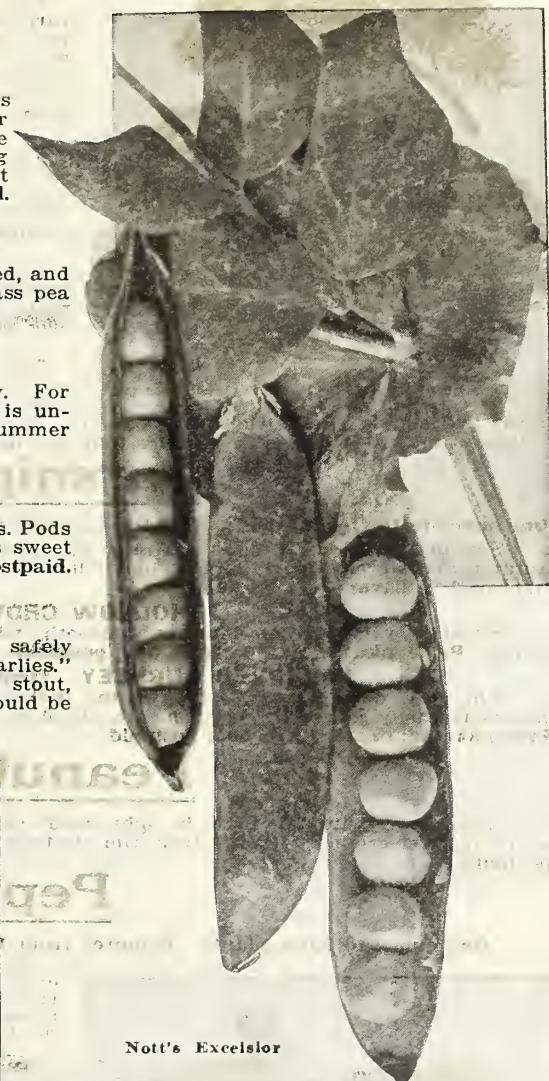
SUTTON'S EXCELSIOR

This handsome wrinkled pea is so hardy, it may safely be planted as early as the hard-seeded "Extra Earlies." The plants are dwarf, about 14 inches high, very stout, exceedingly productive, and the quality is all that could be desired. Price, pkt. 5c; lb. 3c; postpaid.



Champion of England

FOR QUANTITY PRICE,



Nott's Excelsior

LATE OR MAIN CROP VARIETIES *CHAMPION OF ENGLAND

4 feet. Vines are very robust. Bears many pods, straight, and well filled with tender peas, which are sweet and of excellent quality. It is a profuse bearer, most reliable late sort. Price, pkt. 5c; lb. 30c; postpaid.

*TELEPHONE

4 feet. Immensely productive. Pods are very large, so well filled with peas of excellent quality that it has become one of the most prominent late peas to be grown for market. Price, pkt. 5c; lb. 30c; postpaid.

WHITE MARROWFAT

4 feet. Vines are very robust. Bears many pods, always well filled. The peas are of ordinary quality. Price, pkt. 5c; lb. 30c; postpaid.

MELTING SUGAR

This is the best of the edible peas. The pods grow about 5 to 6 inches long, are stringless and very tender, and may be used the same as a snap bean; 3 to 4 feet. Price, pkt. 5c; lb. 40c; postpaid.

SEE COLORED SHEET.



Champion Moss Curled Parsley

hardy and should be cultivated like parsnip. Foliage same as plain parsley. Price, pkt. 5c; oz. 30c; 1 lb. 60c; postpaid.

Parsley

One ounce to 150 feet of drill

Soak the seeds a few hours in lukewarm water and sow early in the spring in drills one foot apart. Thin out to four inches. A few seeds sown in onion rows use no space. To preserve in winter, transplant to a light cellar or glass frames. Parsley is esteemed for flavoring and for the beautiful appearance of the fresh green leaves as a garnish.

CHAMPION MOSS CURLED

The plant resembles a tuft of finely curled moss, leaves extra large, and a rich deep green. Valuable for garnishing and also as ornamental foliage plants for borders of beds. Grows in window boxes. Price, pkt. 5c; oz. 25c; 1 lb. 50c; postpaid.

EXQUISITE

Beautiful and closely curled leaves of dark green, flavor excellent. As a pot plant for winter in window or on dining table it is simply "exquisite." Price, pkt. 5c; oz. 30c; 1 lb. 60c; postpaid.

TURNIP-ROOTED or HAMBURG

The root is the edible portion of this variety, and resembles a small parsnip, both in color and shape. Flesh white, a little dry, having a flavor similar to Celeriac. Very extensively grown and used for flavoring soups, etc. Price, pkt. 5c; oz. 30c; 1 lb. 60c; postpaid.

Parsnips

One ounce to 100 feet of drill; 5 or 6 lbs. per acre. Matures in 125 to 140 days from seed.

Sow in April or early May. Cultivate the same as carrots. They may be dug in the autumn and stored for winter use, but if left in the ground till spring are very much improved in flavor.

HOLLOW CROWN

Standard variety, roots long, very smooth; white, tender, sugary, and of excellent flavor. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

IMPROVED GURNEY. (Improved Half Long.)

The roots do not grow so long as the Hollow Crown, but are of greater diameter and more easily gathered. Very smooth, the flesh fine grained and of excellent quality. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

Peanuts

Culture very simple. Plant in light, sandy soil in April, in pods or shelled, two to a hill on level ground. Hill up from time to time as required. Price, pkt. 5c; lb. 30c; postpaid.

Peppers



Hollow Crown

One ounce to 2,000 plants. Requires from 125 to 160 days from sowing to maturity.

The small peppers are the hottest, the large varieties being quite mild in flavor. Sow in hotbed early in April and transplant to the open ground when weather is favorable. May also be sown in the open ground when danger of frost is past and soil is warm.

CHINESE GIANT

This desirable variety, of recent introduction is undoubtedly the largest sweet pepper ever offered. The flesh is quite thick, very mild and remarkably sweet. Price, pkt. 10c; oz. 80c; 1 lb. \$2.00; postpaid.

GOLDEN DAWN

Golden yellow; mild and sweet, size and shape of Large Bell. Price, pkt. 10c; oz. 80c; 1 lb. \$2.00; postpaid.

LONG RED CAYENNE

If you want a genuine hot pepper, the kind to use is the long red Cayenne. This is the real red-hot kind. Grows 3 to 4 inches. Price, pkt. 10c; oz. 60c; 1 lb. \$1.75; postpaid.

LARGE BELL or BULL NOSE

Large and early square shouldered, flesh thick, and less pungent than most other sorts; much used for mangoes. Price, pkt. 10c; oz. 80c; 1 lb. \$2.00 postpaid.

SWEET MOUNTAIN

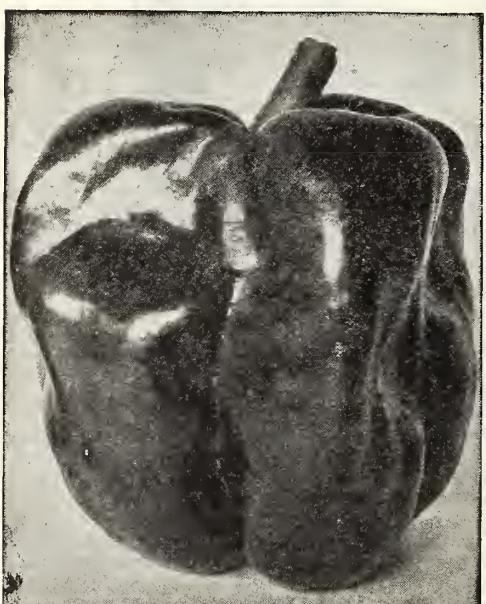
Similar to Bull Nose, though usually larger in size and longer; of very mild flavor. Much used for mangoes. Price, pkt. 10c; oz. 80c; 1 lb. \$2.00; postpaid.

RED CHILI

Fruit is small, bright red very hot and pungent. Plants are very productive. Generally used for making pepper sauce. Price, pkt. 10c; oz. 75c; 1 lb. \$1.75; postpaid.

RUBY KING

The most popular large red pepper. Plants grow 2 feet high and bear a fine crop of handsome extra large, scarlet fruits. Flesh is thick, sweet and mild. Fine for mangoes. Price, pkt. 10c; oz. 80c; 1 lb. \$2.00; postpaid.



Chinese Giant

FOR QUANTITY PRICE, SEE COLORED SHEET.



Small Sugar

JAPANESE PIE

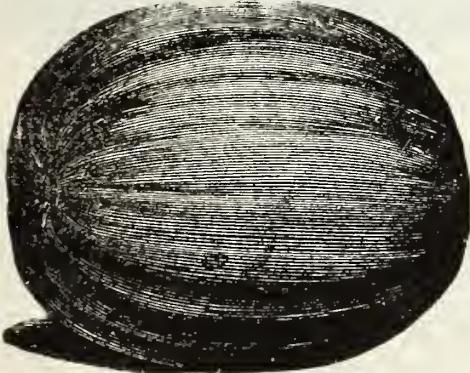
Early and productive, of medium size, large at one end, terminating in a crooked neck. Skin deep green with darker stripes; flesh is a rich salmon color; excellent quality; a good keeper. Price, pkt. 10c; oz. 15c; 1 lb. 40c; postpaid.

CUSHAW or CROOKNECK

(Sometimes called a squash.) Productive; color light cream, sometimes lightly striped; flesh salmon colored; mealy and sweet. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

LARGE CHEESE

This is a very popular pumpkin for pies and is quite commonly known as "Sweet Pumpkin." In size they average about as large as the Connecticut Field, but are flat shaped, with creamy buff skin and thick golden flesh; tender, large, hardy and productive. Excellent for table use. Good keeper. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.



King of the Mammoths

appear, when more sand is added, after removing trash, till it is 4 inches in depth on top of potatoes. The sprouts must be detached from the tubers without disturbing them. To do this hold the tuber in place with the left hand while the sprout is taken with the right. The sprouts are transplanted to the field and placed in rows 4 feet apart by a foot in the row. Ninety days are generally allowed from transplanting to digging.

YELLOW JERSEY, YELLOW NANSEMOND

These are the most desirable varieties. Ready about April 1 Write for prices.

SWEET POTATO PLANTS

Ready about May 1. For prices, see page 9.

IRISH POTATOES. See page 39.

Pumpkins

One ounce to 50 hills; 3 to 4 pounds per acre. From 100 to 120 days from sowing to maturity.

Pumpkins are planted frequently in connection with a crop of corn, or as a second crop after early peas etc. The following varieties are all thin and tender skinned, distinct from the hard or thick-shelled squashes. The fruits are quite susceptible to frost and should be gathered and stored in a cool, dry place. If bruised they will not keep any length of time.

CONNECTICUT FIELD

An immensely productive, large, orange-colored, field pumpkin, usually grown for stock feeding, but it also makes good pies. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

SWEET POTATO

Pear shaped, good size, skin creamy white. The seed is all in the cavity of the large end, the thick neck being solid; exceptionally fine quality. Price, pkt. 10c; oz. 15c; 1 lb. 50c; postpaid.

SMALL SUGAR

Fruits of small size, averaging about ten inches in diameter, of excellent keeping qualities, flattened, slightly ribbed. Skin deep orange-yellow, flesh sweet. Very early. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

**KING OF THE MAMMOTHS**

(Jumbo or Potiron.) Weighs from 40 to 150 pounds. Round, flattened at both ends, skin and flesh bright yellow. It makes a good table pumpkin. Good keeper. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

Sweet Potatoes

One bushel of potatoes should produce 2,000 sprouts. 6,000 to 7,000 plants to the acre.

Succeeds best in light, sandy soil. Stable manure is the best fertilizer. To obtain the sprouts, the entire potatoes are planted in beds, say 5 or 6 feet wide, and as long as required, the bed being opened 20 inches deep, filled with stable manure, and covered with 4 inches of sand. The potatoes are placed upon the sand 1 inch apart and covered with an inch of sand. This is covered with old hay or trash till the sprouts

are 2 inches high. Then the trash is removed and the potatoes are transplanted to the field and placed in rows 4 feet apart by a foot in the row. Ninety days are generally allowed from transplanting to digging.

This is covered with old hay or trash till the sprouts

YELLOW JERSEY, YELLOW NANSEMOND

These are the most desirable varieties. Ready about April 1 Write for prices.

SWEET POTATO PLANTS

Ready about May 1. For prices, see page 9.

IRISH POTATOES. See page 39.

Remember! Small Orders Receive the Same Attention as Large Ones

FOR QUANTITY PRICE, SEE COLORED SHEET.



Radishes

One ounce to 100 feet of drill; ready in 18 to 45 days from seed according to variety

Radishes must make a rapid growth to be crisp and tender. For early use sow in the hotbed, half an inch deep. For an early crop in the open ground, sow thinly in drills on rich, sandy soil as early in the spring as it is fit to work. For a succession sow every two weeks.

Varieties marked * good for forcing.

EARLY BIRD

Decidedly the earliest of radishes. Quick growth is one of the main essentials for a crisp and tender radish, and with loose soil and proper culture the Early Bird is ready for the table in twenty days from the time of sowing the seed, which makes it one of the most desirable sorts ever offered for either forcing or outdoor culture. It is round, or turnip shape; of bright scarlet color and pure white flesh, which is tender, crisp and of the very best flavor. Very desirable for the home garden and a money maker for the market gardener. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

*NON PLUS ULTRA FORCING

This variety has as small a top and is as early as any in cultivation, making it one of the best for forcing under glass. Roots ready to pull may be had in three weeks and they remain fit for use longer than any other early variety. They are small, globular, smooth, very deep red in color; flesh is white, crisp, tender and mild in flavor. May be planted very closely owing to their small tops. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

EARLY SCARLET TURNIP. WHITE TIP

A most popular and attractive variety, a great favorite in many large markets. The radish is bright scarlet, with white tip, and of a beautiful shape; flesh white, crisp and finely flavored. Our strain is the finest in the market. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

EARLY LONG SCARLET, SHORT TIP

The long, slender, handsomely colored roots are most attractive in appearance, crisp, brittle and of the choicest quality. They attain a length of 5 to 6 inches, grow half way out of the ground and are ready for use in about 25 days. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

SAXA

A new forcing radish. Description and price on page 1.

CHARTIER

One of the best varieties for growing outdoors. The radishes are in good condition for the table very early and remain hard and crisp until they reach a diameter of about 1½ inches thus affording good roots for a long time. Roots are long, cylindrical, gradually tapering to a point, are scarlet rose in color, shading into white at the tip. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

EARLY SCARLET GLOBE

A very handsome radish of rich, bright, scarlet color, and oval shape, with very small tops; the flesh is delightfully crisp, juicy and tender. An extra early variety, fit to be pulled in about 3 weeks. Our strain was selected with the greatest care as to size, shape, color and earliness. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

ROSY GEM

We have a very clean, beautiful strain of this popular sort. It is extremely early, maturing in 25 days. It is round, bright scarlet and has a handsome white tip. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

SAKURAJIMA

A Japanese radish of immense size; some single specimens of this variety weigh as much as 15 pounds. In shape it is oval with cream colored skin and pure white flesh. Roots are cooked like turnips, but no strong taste accompanies them, such as is frequently present with cooked turnips. The plants should be thinned out to from 12 to 15 inches apart in the rows, so as to admit of full development; must be sown in May; takes whole season to develop roots. Price, pkt. 5c; oz. 20c; 1 lb. 60c; postpaid.

STUTTGART

Early giant white, large top-shaped, often 4 inches across, flesh and skin white. Remains crisp and solid even after it has attained its full size. Can be stored for winter use. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

Gentlemen:

I have had so much trouble elsewhere in getting seeds that would grow, but have purchased from you several times and the seeds always grew.

Frontier County, Aug. 30, 1917.

Yours truly,
LOIS PYLE.

FOR QUANTITY PRICE, SEE COLORED SHEET.

Radishes—Continued

WHITE BOX

Popular white variety grows quite large. Price
pkt., 5c; oz., 15c; 1 lb., 50c; postpaid.

WHITE OLIVE FORCING

White flesh and skin; crisp and mild flavor.
Price, pkt., 5c; oz., 15c; 1 lb., 50c; postpaid.



Icicle

WINTER RADISHES

CALIFORNIA MAMMOTH WHITE

Pure white, about 1 foot long and 2 or 3 inches through, tapering regularly to tip. The flesh is tender and crisp, keeping well through the winter. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

CHINA ROSE WINTER

Bright rose colored variety. The most popular of the winter radishes because of its bright color, firm flesh and long keeping qualities. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

LONG BLACK SPANISH

One of the largest, latest, as well as the hardest of radishes. Roots of medium size, oblong black and flesh is of firm texture. Price, pkt. 5c; oz. 15c; 1 lb., 50c; postpaid.

ROUND BLACK SPANISH

Roots round, sometimes top-shaped, 3 or 4 inches in diameter, skin black, flesh white. Fine for winter use as the roots keep a long time. Price, pkt. 5c; oz., 15c; 1 lb. 50c; postpaid.

COLLECTION NO. 3

7 BEST RADISHES, 25c; POSTPAID

This collection includes 1 packet each of the following best varieties: Early Bird, Early Scarlet Turnip, White Tip, Icicle, French Breakfast, Early Long Scarlet, Crimson Globe and Chinese Rose Winter, all for 25c; postpaid.

MAKE 25c IN FIVE MINUTES, SEE PAGE 21

FOR QUANTITY PRICE, SEE COLORED SHEET.

EARLY SCARLET TURNIP

A round red, turnip-shaped radish, with a small top and of quick growth. A very early variety, deserving general cultivation on account of its rich color and crisp, tender flesh. Very desirable for early outdoor planting, as well as forcing. Price, pkt. 5c; oz., 15c; 1 lb. 50c; postpaid.

*EARLIEST CARMINE OLIVE

Excellent quality; very bright and attractive. Price, pkt., 5c; oz., 15c; 1 lb. 50c; postpaid.

FRENCH BREAKFAST

A great favorite. Beautiful, bright scarlet, with pure white tip. Oblong in shape, medium size, makes rapid growth. A fine table variety on account of its excellent quality and appearance. Fine for open ground or forcing. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

*GIANT CRIMSON GLOBE

A new variety suitable for forcing or early planting out of doors. Will grow to 6 and 7 inches in circumference and remain solid and juicy, often 4 inches across. Is round to oval, and very attractive. Price, pkt. 5c; oz., 15c; 1 lb., 40c; postpaid.

LONG WHITE VIENNA or LADY FINGER

Pure white, long tapering shape, attractive, sweet, mild, delicious. Matures in 25 days. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

NEW SPARKLER

A distinct, new 18 to 21-day radish; has a beautiful bright scarlet top; with tip of purest white. Is solid, crisp and sweet, remaining so for a long time. Price, pkt., 5c; oz., 15c; 1 lb., 50c; postpaid.

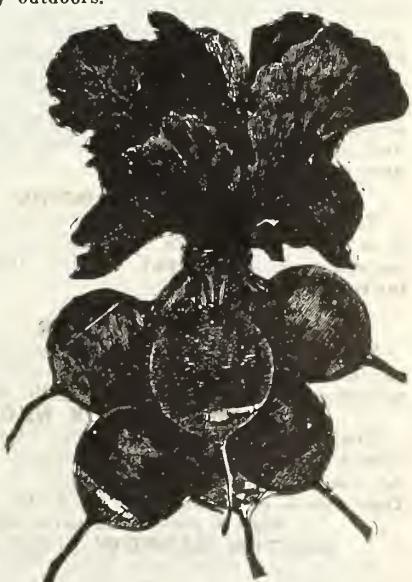
WHITE ICICLE

Finest of early, pure white varieties. Ready for pulling in about three weeks. Long and slender, clear pure white, making them very attractive when on sale and on the table. Crisp and tender until it attains large size. Price, pkt. 5c; oz., 15c; 1 lb. 50c; postpaid.

WHITE STRASBURG

Of somewhat larger size and thicker than Vienna. Very solid, excellent market variety. 4 inches long, 2 inches thick. Price pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

*For greenhouse forcing, hotbed planting or for extra early outdoors.



New Sparkler

Squash

Summer & Early Sorts

One ounce to 20 hills; 4 to 5 lbs. to the acre. Hills 4 feet apart each way. Ready for use in from 55 to 65 days from planting

Any good, enriched soil is adapted to the growth of the Squash. The seed should not be sown in the spring until danger from the frost is past and the ground is warm and thoroughly settled. Keep the earth about the plants loose and clean. Three plants to the hill. For remedy against bugs, see Insecticides, Page 104.

DELICATA SQUASH

A perfect all-season Squash, summer and winter crop on one plant. Produces fifteen to twenty fruits to a vine. Delicious chestnut flavor. Delicata produces an enormous number of fruits of such convenient size that the entire squash can be used at one time. It is ready almost as soon as the early summer sorts, is better flavored, and remains in perfect condition as long as any keeping variety. Its flavor when cooked has been compared to the sweet potato, others liken it to roasted chestnuts, but all agree that it is delicious. The fruits are about 9 inches long, and when ripe are deep yellow, irregularly striped and mottled with a dark olive green. The flesh is thick, fine texture and pale yellow in color. It is unexcelled for baking—the shape and size make it perfect for this purpose and none better for pies. When boiled it is dry, granular and mealy. Pkt. 10c; oz. 25c; 1 lb. 65c; postpaid.

FORDHOOK

Small, oblong, shell yellow; flesh dry and sweet, and of good flavor. Very early; desirable for either summer or winter use. Pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

GOLDEN BUSH SCALLOP

A very early flat, scalloped variety; skin deep yellow; flesh pale yellow and well flavored. Pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

SUMMER CROOK NECK

Very early and productive. Fruit about one foot long, with crooked neck and warty surface; color bright yellow. Pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

WHITE BUSH SCALLOP. (Patty Pan.)

Very early, skin white, flesh tender and delicate, bears abundantly. Pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

Fall and Winter Sorts

From planting to maturity 100 to 125 days

Gather before injured by the frost for winter use, care being taken not to break the stem from the squash, as the slightest injury will increase the liability to decay.

CHICAGO WARTED HUBBARD

Large size, dark green color, distinguished by a dense covering of knots (warts), a sure indication of splendid quality, thick flesh; good keeper. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

GOLDEN HUBBARD

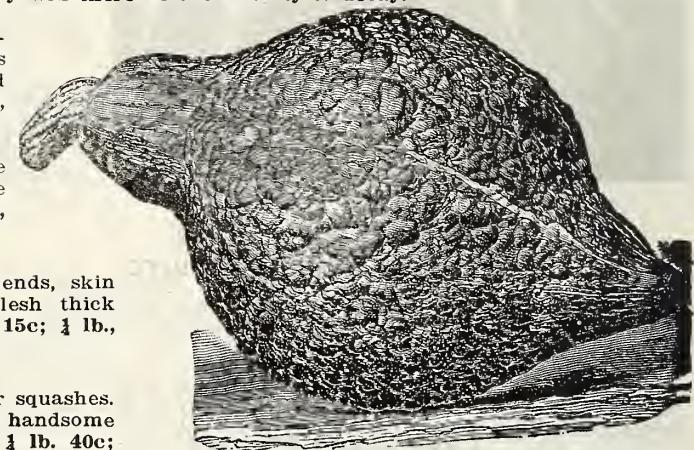
Similar to the above, except that the skin is deep, orange yellow. Flesh fine grained and of exceptional flavor. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

MAMMOTH CHILI

Enormous size, round, flattened at ends, skin orange color and slightly ribbed. Flesh thick and deep yellow. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

ORANGE MARROW

The earliest by 10 days of the winter squashes. It is creamy orange in color; fine form, handsome appearance. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.



Hubbard Squash

PERFECT GEM

Nearly round; skin creamy white, flesh fine grained. Vine bears great number of small squashes. Pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

WINTER CROOK NECK

Fruit long and crook-necked, skin dark green mixed with yellow. A fine keeper. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

One ounce to 20 hills; 3 to 4 lbs. to the acre.

Hills 8 feet apart each way.

BOSTON MARROW. (Autumnal.)

Large, oval form skin bright orange, mottled with cream color; flesh rich salmon yellow, fine

grained and good flavor, unexcelled for pies. Pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

MARBLEHEAD

Resembling the Hubbard, but of a lighter color, and is remarkable for its sweetness, dryness and delicious flavor. Good keeper. Price, pkt. 5c; oz. 15c; 1 lb. 50c; postpaid.

SIBLEY. (Pike's Peak.)

Pear-shaped with stem on large end, skin smooth, pale green; flesh thick, orange color; very dry, rich and delicate flavor. Price, pkt. 5c; oz. 15c; 1 lb. 40c; postpaid.

LOW PRICES ON SEEDS SEE COLORED SHEET.

Spinach

One ounce to 100 feet of drill; 12 lbs. to the acre

Cultivated very extensively for "greens." A profitable crop for market. Select a rich, well-drained soil, highly manured. For a succession, sow early in April and again in May in drills, one foot apart and one inch deep, properly thinning out when the plants are an inch in the leaf. For early spring use, sow early in autumn and protect the plants with a light covering of leaves or straw.

BLOOMSDALE (Savoy.)

The earliest of all and one of the best; the leaves are numerous, curled and wrinkled. Price, pkt. 10c; oz. 20c; 1 lb. 50c; lb. \$1.50; postpaid.

LONG-STANDING. (Thick Leaved.)

A fine market sort. Leaves large and thick, somewhat crumpled. Does not run to seed early. Price, pkt. 10c; oz. 20c; 1 lb. 50c; lb. \$1.50; postpaid.

NEW ZEALAND

Entirely different from true spinach in type, in that it thrives during hot weather and in any soil, rich or poor. The tender shoots with golden yellow leaves are of good quality and may be cut throughout the summer. This is something new, but extra good. Plant three or four seeds in hills two feet apart each way. Price, pkt. 10c; oz. 20c; 1 lb. 50c; lb. \$1.75; postpaid.



Salsify or Vegetable Oyster

One ounce to 75 feet of drill

Resembles a small parsnip, and when thinly sliced and cooked is a good substitute for oysters, having a very similar flavor. It succeeds best in light, rich soil. Sow early and quite deep. The leaves when they first appear look like grass, making it specially important to plant in rows. Thin out and cultivate like the carrot. Roots are perfectly hardy, and may remain out all winter, but should be dug early in the spring; store a quantity for winter use in cellar.



MAMMOTH SANDWICH ISLAND

Grows uniformly to an extra large size. The root is pure white and of superb quality. Invaluable to market gardeners. Price, pkt. 5c; oz. 15c; 1 lb. 50c; lb. \$1.60; postpaid.

Swiss Chard or Sea Kale

Far superior to the common beet for greens, of almost the same flavor and equal to spinach. It is much easier to wash and prepare for the table. Sown early in spring in rows; thin seedlings out to 6 inches in the rows, it makes rapid growth of leaves, and is fit for use for greens sooner than any other variety, and can be cut throughout the entire summer. Later the leaves grow very large, with broad, flat, wax-like stems and mid ribs, which may be cooked like asparagus, or made into pickles. Price, pkt. 5c; oz. 20c; 1 lb. 50c; lb. \$1.50; postpaid.



Swiss Chard.

Tobacco

1 ounce will sow about 25 square feet and produce plants for 1 acre

CONNECTICUT SEED LEAF

An old well-known variety. Price, pkt. 5c; oz. 20c; 1 lb. 75c; postpaid.

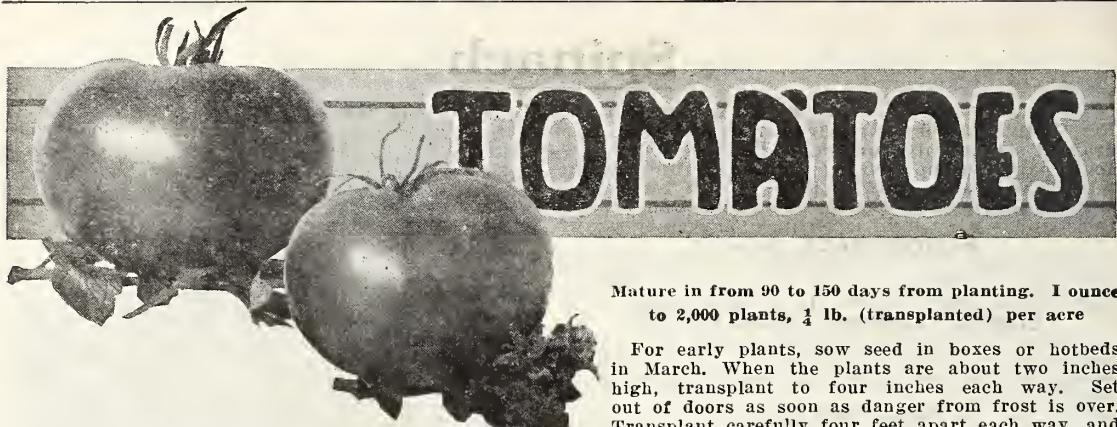
HAVANA

Best for the manufacture of cigars. Price, pkt. 5c; oz. 20c; 1 lb. 75c; postpaid.

LINCOLN BRAND EXCELLENCE

We want to impress on all our customers the necessity of buying pure seeds. We suppose only such seeds as we find show a high percentage of purity. This is a very important matter to the planter. Quality in your seed counts more than in almost anything else. Beware of cheap seeds. The best is always the cheapest. When you are offered cheap lots of seeds you are almost sure to get poor quality. We reclean all our seeds before sending them out, and put them up in first class bags; therefore, they are worth more than seeds that are not cleaned. It will pay you to take these facts into consideration when you decide from whom you are going to order your seeds the coming season. This guarantee of excellency applies also to all our supplies. The back pages of this book will be found filled with poultry foods and supplies, also all things used by the market gardener and fruit grower.

For Quantity Prices on all seeds on this page see colored sheet.

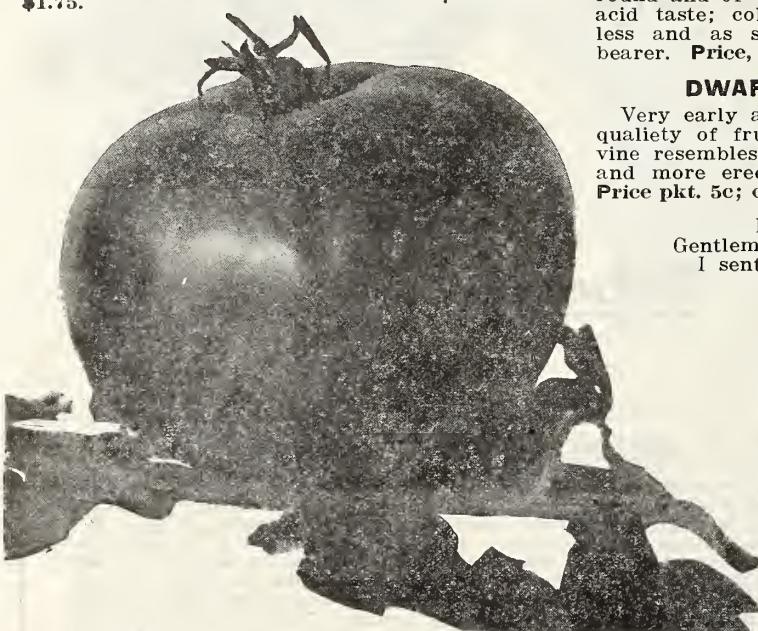


LIVINGSTON'S CORELESS

A new, large main-crop variety. In shape it is almost round, having about the same diameter each way. It has no green core, and is of a bright red color, making it valuable either for slicing or for canning. It is very productive and the firm, solid flesh makes it one of the best market varieties. It ripens all over at the same time. Price, pkt. 5c; oz. 35c; 1 lb. \$1.00; postpaid.

JOHN BAER

The best tomato on earth. It is the offspring of two marvelous tomatoes, the result of 15 generations of improvement and selection. It produces the most perfect, high crown red tomatoes in 30 days, also an enormous crop under ordinary conditions; 50 to 100 fruit to each plant, ripens evenly right up to the stem, no cripples, no scalds, no blight, no cracked, wrinkled one-sided, uneven, scarred fruit. When dead ripe John Baer tomato will not burst. It has a wonderful glistening, bright red color, and a mild, delicious, sweet flavor, is almost seedless, a marvelous stem setter, often 10 fruit in first cluster, solid and meaty. John Baer Tomato is the earliest, finest shaped fruit and has the best color and shipping quality of any tomato on earth. Price pkt. 10c; 1 oz. 35c; oz. 65c; 1 lb. \$1.75.



TOMATOES

Mature in from 90 to 150 days from planting. 1 ounce to 2,000 plants, $\frac{1}{4}$ lb. (transplanted) per acre

For early plants, sow seed in boxes or hotbeds in March. When the plants are about two inches high, transplant to four inches each way. Set out of doors as soon as danger from frost is over. Transplant carefully four feet apart each way, and cultivate well as long as the vines will permit. To obtain early fruit, pinch off the ends of the branches when the first fruit is set.

COLOSSAL TOMATO

The Colossal Tomato is not only a large tomato, but is simply colossal in size. It is the largest tomato in cultivation. Existing mammoth or ponderous tomatoes are not in it with the Colossal. It is a tomato of fine quality. It is practically coreless and seedless. Its flavor is of the best, has none of that biting acid taste that is often found in other varieties, but is always sweet, mildly acid, melting, cool and pleasant tasting. It is the very best tomato for canning. The Colossal is the tomato for the experienced gardener for this tomato does its best and attains its largest size when grown on a trellis or fastened to stakes. Care should be taken however, to tie close to the fruit or the great size will break the stems. Price pkt. 10c; 1 oz. 35c; $\frac{1}{2}$ oz. 60c; 1 oz. \$1.00.

CRIMSON CUSHION

A continuous and late fruiter. Of immense size, often weighing a pound, and smooth as an apple. Ripens thoroughly all over. Nearly round and of very good quality, being free from acid taste; color, bright scarlet. Nearly seedless and as solid as beefsteak. A prodigious bearer. Price, pkt. 5c; oz. 25c; 1 lb. 75c; postpaid.

DWARF STONE. (Livingston's)

Very early and productive; in size, color and quality of fruit equals the Stone; in habit of vine resembles Dwarf Champion, but is stronger and more erect, admitting very close planting. Price pkt. 5c; oz. 25c; 1 lb. 65c; postpaid.

Benkleman, Nebr., Mar. 5, 1917.

Gentlemen:—

I sent to you for Asparagus Roots and John Baer tomato seed two years ago and used quite a bit of my Asparagus last year and expect it to be fine this year. The plants arrived in splendid condition and all grew except one. My John Baer Tomatoes were simply grand in 1915, from the one packet of seed I raised 10 bushels of tomatoes in my yard back of the house on much less than one-half a lot of ground. This year they were fine but were planted later so did not get as many ripe tomatoes but the green ones were grand and sold at \$1.00 per bu. I never will raise any other kind. Yours very truly,

MRS. GEO. THOMPSON.

For Quantity Prices on all seeds on this page see colored sheet.

Tomatoes—Continued

CHALK'S EARLY MARVEL

The largest, smoothest, and finest flavored, early bright red tomato; so hardy that a very early planting can be made in the open ground. The foliage protects the fruit, borne in clusters, from sunscald, enabling the heavy crop to ripen perfectly. The tomatoes are bright scarlet, deep globe shape, and solid. Produced continuously throughout the season. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.00; postpaid.

EARLIANA

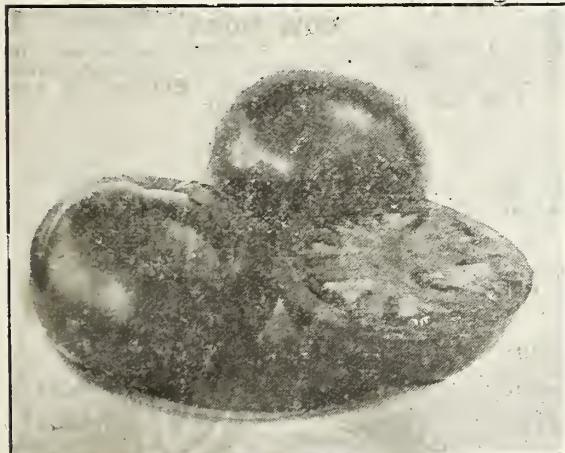
It is a full week ahead of all others. Plants of strong growth and very productive. Fruits large, deep red and of superior quality. Smooth and free from cracks. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.10; postpaid.

QUARTER CENTURY

Very early. Like the Dwarf Champion only bright red. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.10; postpaid.

LIVINGSTON'S HUMMER

It is as round as a ball, and there is very little indenture about the stem, there is practically no waste in preparing the fruits for use. The flesh is rich crimson scarlet and of a very fine quality. Ripens early, and is especially good for canning. Not quite as large as some varieties, but a good keeper, thus making it a good variety for marketing. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; postpaid.



Earliana

OTHER STANDARD VARIETIES

These need no extended description. All postpaid.

Pkt. Oz. $\frac{1}{4}$ lb.

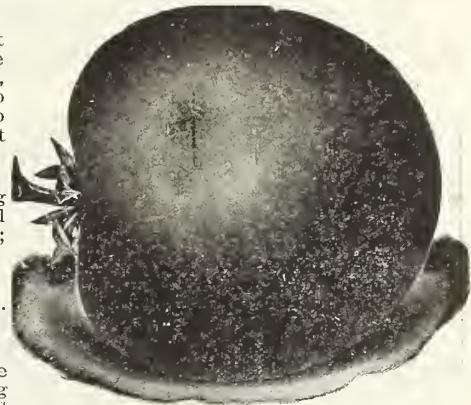
ACME. Bright pink, smooth very productive, thick flesh.....	.5c	.30	.90
BEAUTY. Large, smooth purplish pink, thick flesh .....	.5c	.30	.90
ENORMOUS. Deep red, smooth, very large.....	.5c	.50	1.25
FAVORITE. Large, smooth, productive, good shipper.....	.5c	.35	1.00
DWARF CHAMPION. (Tree Tomato) Extra early .....	.5c	.30	.90
TROPHY. Large bright red, solid tomato.....	.5c	.30	.90
STONE. Large bright scarlet, good shipper.....	.5c	.30	1.00

SMALL TOMATOES

Used for preserves, pickles, etc.

Pkt. Oz.

YELLOW PEAR. Bright yellow, fine flavor.....	10c	.40
RED PEAR. Fruit bright red.....	10c	.40
YELLOW PLUM. Clear deep yellow.....	10c	.49
RED CHERRY. Bright red, grows in clusters.....	10c	.40
YELLOW CHERRY. Deep yellow, a favorite for preserving.....	10c	.40
PEACH. Skin covered with slight bloom as in a peach	10c	.40
HUSK (Ground Cherry) Golden yellow.....	10c	.40



New Globe

GOLDEN QUEEN

Best large yellow variety. The superior flavor of the large yellow varieties is bringing them into favor as table fruit. Ripens very evenly; fruit is smooth of good quality and fine flavor. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.25; postpaid.

JUNE PINK

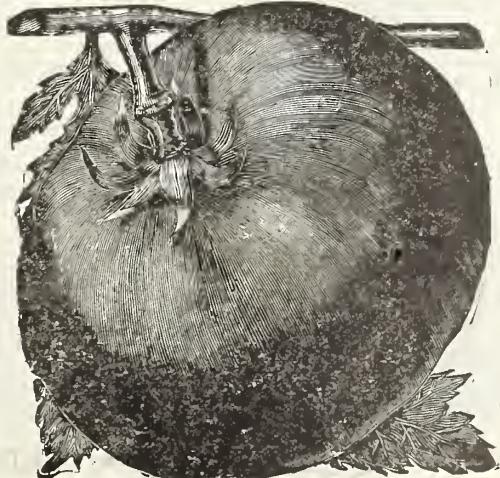
An extra early purple-fruited tomato similar to the popular-scarlet-fruited Earliana in growth of vine, shape and size of fruit and time of maturing. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. 95c; postpaid.

LIVINGSTON'S NEW GLOBE

Beautiful globe shape, permitting greater number of slices than with flatter sorts. Among the first to ripen, large size, very smooth, firm fleshed, few seeds, ripens evenly; color rose, tinged purple. Flavor excellent. A good general cropper; one of the best for forcing. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.00 postpaid.

PONDEROSA

This is the largest fruited tomato, and is of a fine quality for slicing. The vines are of strong growth; fruits oblong in form, deep through and generally ridged or ribbed; deep purple in color. They are solidly fleshed with small seed cells; of fine flavor. Planted in good soil, fruits frequently attain weight of 1 lb. or more. Pkt. 5c; oz. 35c; $\frac{1}{4}$ lb. \$1.00; postpaid.



Ponderosa

For Quantity Prices on all seeds on this page see colored sheet.

Ready from 40 to 60
days from seed

Turnips

1 oz. to 150 ft. drill
2 lbs. to acre

The turnip is most easily affected in form and flavor, by soil, climate and mode of culture. Sow in drills about 16 inches apart and half an inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly dug. Sow for main crop from the middle of July to last of August. In the field, turnips are generally sown broadcast, though much larger crops are obtained by drill culture.



Early White Snowball.

EARLY PURPLE TOP GLOBE

Deservedly popular, heavy producer, of rapid growth, and superior quality; either for the table or stock. An excellent keeper. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

EXTRA EARLY PURPLE TOP MILAN

Two weeks earlier than any other. Flat; white, with purple top; flesh white; fine grained and delicate. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

EXTRA EARLY WHITE MILAN

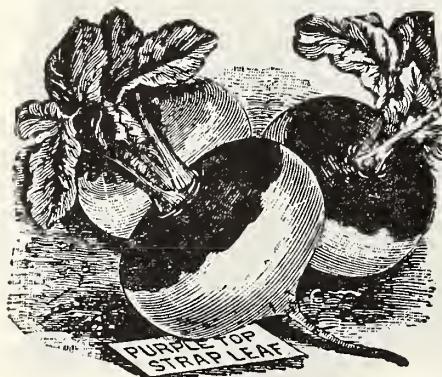
The earliest of all turnips, and of excellent quality. Top is very small, upright and compact, so the rows can be planted close together. The roots are clear white, very smooth, flat and symmetrical. The flesh is white, sweet and tender. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

GOLDEN BALL

A most delicate and sweet, yellow-fleshed turnip of excellent flavor. Not of large size, but very firm, hard and keeps well. Fine table variety. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

LARGE YELLOW. (Amber Globe.)

Flesh yellow, fine grained and sweet, very hardy and productive; splendid keeper. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.



Turnips

EARLY WHITE FLAT DUTCH STRAP LEAVED

A most excellent garden turnip and, like Purple Top Strap Leaf, a standard flat variety, maturing at the same time. Root medium sized, from 4 to 5 inches in diameter and about 2 inches thick; color white; flesh sweet and tender, and very desirable for table use; a good keeper. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

SNOWBALL or WHITE SIX WEEKS

Earliest and most perfectly formed round white turnip. Roots are very uniform in size and shape, short top and single taproot. Flesh snowy white, solid, crisp and very sweet. Is of quick growth and suitable for first early as well as later sowings. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

WHITE EGG.

An egg shaped variety, for spring or fall sowing; flesh white, firm, fine grained, mild and sweet; particularly desirable for table. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

COW HORN

A white turnip of peculiar long shape and quick maturity. It grows to a large size, standing half out of the ground. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.



Golden Ball.

POMERANIAN WHITE GLOBE

Very productive; in good soil roots grow from 10 to 12 pounds; good for table or stock. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

PURPLE TOP STRAP LEAF FLAT

The old well-known sort of early spring and fall; purple above ground, flesh fine grained, of mild flavor and a good keeper. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

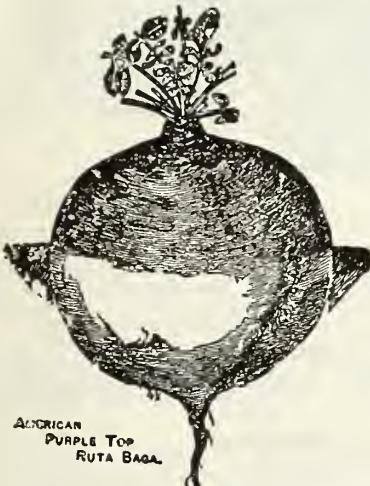
LINCOLN BRAND SEEDS ARE THE BEST

For Quantity Prices on all seeds on this page see colored sheet.

Ruta Bagas or Swedes

Should be sown about a month earlier than turnips

This is one of the best and most valuable of root crops. They may be very easily grown and more cheaply than potatoes, and usually are worth as much per bushel on the market.



AMERICAN
PURPLE TOP
RUTA BAGA.

If intended for a cultivated crop, sow in drills 15 to 24 inches apart; cover seed one-half inch and thin to 6 to 8 inches in rows. The yield will be greatly increased by frequent cultivation. The time of sowing depends somewhat on locality and the purpose for which the crop is to be used. If for market, sow the latter part of June. If for stock feeding, seed may be sown as late as July 15th and it will, under favorable conditions, mature a crop before the ground freezes. May be sown broadcast if desired. Use one ounce to 250 feet of drill, 1½ pounds to the acre in drills or 2½ pounds broadcast.

AMERICAN PURPLE TOP

Tops very small; bulbs large; skin purple above; yellow underneath; flesh golden yellow, fine texture, sweet and of richest flavor; hardy, productive, and a good keeper; desirable for table use and stock feeding. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.45; postpaid.

SKIRVING'S PURPLE TOP YELLOW

Quite productive; flesh yellow and sweet flavor, shape oblong. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

SWEET GERMAN. (Long White French.)

Bulb enormous. Flesh white, solid and rich. The best keeper of all the Swedes, and popular for both table and stock. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; postpaid.

RHUBARB

One Ounce to 500 Plants

Rhubarb is an excellent spring food, possessing medicinal properties. It is the first vegetable of the season from the garden, and no planter should be without it.

The richer the ground is, the better. Sow in drills an inch deep, and thin to six inches apart. In the fall transplant into very highly manured and deeply stirred soil, setting them four feet apart, and give a dressing of coarse manure every spring. The stalks should not be plucked until the second year, and the plant never allowed to exhaust itself by running to seed. In removing be careful to pull off close to the roots instead of cutting.

VICTORIA

Stalks very tall and large; skin thick and red-stained; pulp quite acid; very productive. Pkt. 5c; oz. 15c; ¼ lb. 60c; postpaid.

LINNAEUS

A large and tender sort, sometimes called wine plant. Pkt. 5c; oz. 15c; ¼ lb. 60c; postpaid.

RHUBARB ROOTS

Set in spring and they will be ready for use in the following season. 10c each; postpaid. 5c each, 50c per doz.; by express, not prepaid.

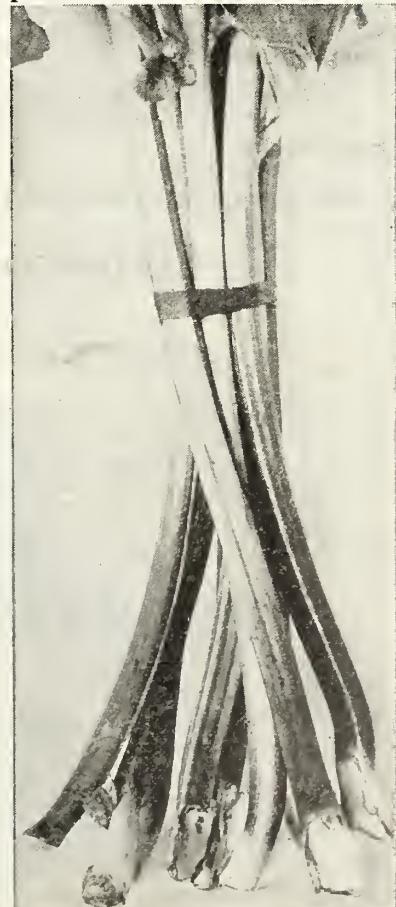
You have now come to the bottom of the last page of illustrated garden seeds. Did you find everything you wanted in the garden seed line? If not, turn back and take another look. We feel sure it must be there; then if you do not find it write us a letter, and if we don't have it we will get it for you if it is to be had.

Crawford County, Mo., Mar. 18, 1917.

Dear Sirs:

I have been using your seeds for the past six years and have had very fine success with them. My garden is always the talk of the neighborhood. I always put in a good word for Griswold's seeds.

Yours truly,
MRS. F. VOLENETY.



Rhubarb

GARDEN COLLECTIONS, SEE PAGE 38

For Quantity Prices on all seeds on this page see colored sheet.

Griswold's Home Garden Vegetable Collection No. 4

45 LARGE FIVE CENT PACKAGES FOR \$1.50; POSTPAID

JUST ENOUGH FOR YOUR GARDEN

It often happens that in looking through a catalog you cannot tell just what varieties and quantities of seed you need for your garden to furnish enough vegetables for a medium sized family throughout the season. This collection is made up of just the varieties you need.

BEANS—

- 2 pkts. Wardwell's Kidney Wax.
- 2 pkts. Burpee's New Stringless.
- 2 pkts. Early Golden Cluster Wax.

BEETS—

- 1 pkt. Early Model

CABBAGE—

- 1 pkt. Early Jersey Wakefield
- 1 pkt. Premium Late Flat Dutch.

CARROTS—

- 1 pkt. Ox Heart

CAULIFLOWER—

- 1 pkt. Early Snowball

SWEET CORN—

- 1 pkt. Golden Bantum.
- 1 pkt. Early Minnesota.
- 1 pkt. Stowell's Evergreen

CUCUMBERS—

- 1 pkt. Long Green.

ENDIVE—

- 1 pkt. White Curled.

KOHL RABI—

- 1 pkt. Early Purple.

LETTUCE—

- 1 pkt. Simpson's Early Curled
- 1 pkt. Early Prize Head

PARSNIPS—

- 1 pkt. Hollow Crown.

PARSLEY—

- 1 pkt. Champion Moss Curled

PEPPER—

- 1 pkt. Sweet Mountain

PUMPKIN—

- 1 pkt. Small Yellow Sugar.

MUSTARD—

- 1 pkt. White.

MUSK MELON—

- 1 pkt. Rocky Ford.

WATERMELON—

- 1 pkt. Tom Watson

ONION—

- 1 pkt. Large Red Weatherfield.

PEAS—

- 2 pkts. Alaska.
- 2 pkts. American Wonder.
- 2 pkts. Nott's Excelsior.

RADISHES—

- 1 pkt. Crimson Globe.
- 1 pkt. New Sparkler.
- 1 pkt. Icicle.
- 1 pkt. Long Scarlet.

SQUASH—

- 1 pkt. Summer Crook Neck.
- 1 pkt. Chicago Warted Hubbard.

SPINACH—

- 1 pkt. Bloonisdale.

SALSIFY—

- 1 pkt. Mammoth Sandwich Island.

TOMATOES—

- 1 pkt. Early Jewel.
- 1 pkt. Ponderosa.

TURNIPS—

- 1 pkt. White Egg.
- 1 pkt. Purple Top Strap Leaf.

ABOVE LIST REGULARLY SELLS FOR \$2.25; YOU GET IT FOR \$1.50 POSTPAID.

Griswold's Flower Garden

COLLECTION NO. 5

FIFTEEN LARGE 5-CENT PACKAGES FOR 50c; POSTPAID

It is difficult to select Flower Seeds which give the best and most pleasing effects unless one is familiar with their habits of growth, etc. The collection we offer below is made up of the best and most popular varieties known.

- | | | | |
|------------------------------|----------------------|-------------------|--------------------|
| 1 pkt. Alyssum (Little Gem) | 1 pkt. Cosmos | 1 pkt. Pansy. | 1 pkt. Sweet Peas. |
| 1 pkt. Asters, Giant Comet. | 1 pkt. Four O'clock. | 1 pkt. Petunia. | 1 pkt. Verbena. |
| 1 pkt. Balsam (Lady Slipped) | 1 pkt. Gaillardia. | 1 pkt. Portulaca. | 1 pkt. Zinnia. |
| 1 pkt. Bachelor's Button. | 1 pkt. Nasturtium. | 1 pkt. Salvia. | |

NOTE—PLEASE ORDER COLLECTION BY NUMBER.

Griswold's Choice Vegetable Plants

We grow these in large quantities and also contract with careful hotbed growers to guard against failures.

NOTE—WE CAN SUPPLY ONLY THE VARIETIES LISTED HERE.

CABBAGE. Ready about April 25th. We can supply the following varieties. Early Jersey, Wakefield, Early Winningstadt, Early Flat Dutch, All Season, Sure Head, Late Flat Dutch, Large Late Drumhead.

CAULIFLOWER. Early Snowball.

CELERY. White Plume, Golden Self Blanching, Giant Pascal.

CHIVES. Clumps of roots, 25c each; postpaid; \$1.50 per dozen; by express.

EGG PLANT. New York Purple.

PEPPER. Chinese Giant, Large Bell or Bull Nose, Ruby King, Long Red Cayenne.

SWEET POTATOES. Yellow Jersey, Red Jersey, Southern Queen.

TOMATOES. Dwarf Champion, Chalk's Early Jewel, Earliana, Ponderosa, Stone, Golden Queen, Yellow Pear.

JOHN BAER TOMATO PLANTS.

DWARF PONDEROSA TOMATO PLANTS.

FOR PRICES OF ABOVE PLANTS SEE PAGE 9



SEED POTATOES

FOR SPRAYERS AND INSECTICIDES

See Pages 100-104

8 to 12 bushels required to the acre.
One peck will plant about 100 hills

Potatoes have proven a most profitable crop for several years. Market prices have ranged from \$1.10 to \$2.00 per bushel for ordinary eating stock during winter and spring and at such prices there is no field crop that will yield better returns for the land and labor used in the growing. This year seed potatoes are very scarce and high priced, however, we will have a very choice lot of Northern grown seed, and we believe we shall be able to meet all demands with choice stock that has been carefully sorted and stored under conditions that does not weaken the germ.

With no other seed is the importance of change more essential than with potatoes, and by using our Northern grown seed you are assured of early maturity, increased yield and vigorous growth. The following varieties are, we think, the best and most satisfactory sorts for growing in Nebraska and other states of the same latitude. Most of our seed potatoes are grown in Minnesota or the Dakotas and are of superior quality. Order early as possible and we will ship as soon as weather permits.

NOTE:—AT THE TIME OF ISSUING THIS CATALOG SEED POTATO PRICES ARE FLUCTUATING AND THE MARKET IS SO UNSETTLED THAT WE ARE UNABLE TO QUOTE A PRICE FOR ANY LENGTH OF TIME. WHEN YOU ARE READY TO BUY, WRITE US FOR PRICES WHICH WE GUARANTEE TO BE AS LOW AS GOOD SEED POTATOES CAN BE BOUGHT. IT IS OUR OPINION THAT SEED POTATOES WILL BE SOMEWHAT CHEAPER BY PLANTING TIME.

Extra Early Potatoes

EARLY SIX WEEKS. Another potato of the Ohio type in great demand. Not the heaviest yelder, but good sized, smooth, round to oblong tubers in eating condition before the well-known Early Ohios.

RED TRIUMPH. Earlier than any other, desirable for the first "new potatoes." Tubers nearly round, medium in size, reddish pink in color.

ACME. The most profitable early potato in cultivation. Fit to eat in six weeks and crop matures in ten weeks from planting. Prolific yelder; tubers are oblong, smooth; skin flesh color; flesh white; upright strong vines with tubers growing compactly in the hill. Eyes shallow, quality excellent, mealy and of fine flavor. Keeps well.



WRITE FOR QUANTITY PRICES OF SEED POTATOES

Main Crop Potatoes



CARMAN NO. 3

This potato is of large and uniform size, yielding immense crops. It is of perfect form. It has but a few eyes, and they are shallow. The skin and flesh are extremely white and its cooking qualities are very fine. It is a remarkably handsome potato, enormously prolific.

RURAL NEW YORKER

It is very large, unusually smooth, with few and shallow eyes; form slightly oblong, and rather flattened. Skin and flesh white, quality excellent, season intermediate. Tubers of great uniformity in size, almost every one marketable. It holds a leading place as a standard field cropper.

IRISH COBBLER

It is an excellent extra early variety, maturing good sized tubers seven weeks from time of planting; producing very few, if any, small potatoes; all tubers being of marketable size. Makes a short, upright growth so the hills may be only a short distance apart. The flesh is pure white, with clean, smooth skin. Splendid keeper, excellent quality, always cooking dry and mealy. Especially suited to dry climates on account of its deep roots.



**TO KILL POTATO
BUGS USE "BUG
DEATH" WITH AN
ACRE AN HOUR SIFT-
ER. PAGE 103.**



Tubular Planter	Hand Potato Planter	Acme Hand Planter	Potato Price \$1.50	Potato Price \$1.00
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by express.

RED RIVER EARLY OHIO

This is the most popular early potato in this country. We have more calls for it than any other early variety. Every potato grower knows what it is and knows just what it will do in his locality. It is the standard extra early the world over and other varieties are measured by it. We have an extra choice strain of Early Ohio. Our Red River Valley stock grown in North Dakota last fall, is the earliest, purest, and altogether the handsomest stock of Early Ohio potatoes to be found anywhere, and as fine as one cares to see. The tubers are smooth and regular in shape, free from prongs, perfectly pure and full of vigorous life. They are selected with the utmost care, and the result is grand, such as to delight everyone who knows and appreciates a good potato.

HYBRIDIZED POTATO SEED

FROM THE SEED-BALLS—HEADQUARTERS STOCK.

Millions never saw a Potato Seed Ball. Thousands have tried in vain to get the seed. Now is your opportunity. This unrivaled seed will produce an endless variety of new kinds. Your fortune may be in one of them. They are as easy to grow as tomatoes.

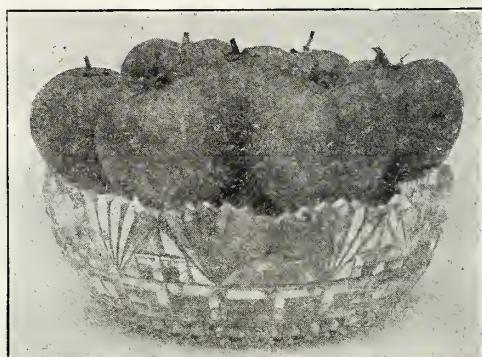


PHOTO OF POTATO SEED BALLS—ONE-HALF NATURAL SIZE.

 It is from these that ALL valuable new varieties of Potatoes are produced.

Growing new and distinct Seedling Potatoes from the Seed-Ball Seed is intensely interesting. They will be the greatest curiosity of your garden. This seed will positively produce innumerable new kinds, colors, shapes, sizes, and qualities. The product will astonish you. Some may be of immense value and bring you a golden harvest. Every farmer, gardener, and bright boy should plant a few packets. You may be one of the lucky ones. Full directions on every packet.

READ THESE EXTRACTS FROM CUSTOMERS LETTERS.

"I grew 101 Potatoes from one plant of your Potato Seed. Every plant was a different variety." Mrs. Eileen Keener.

"I raised 50 hills from one Packet; many kinds and colors; some early, some late; 94 Potatoes on one hill." J. H. Skinner.

"Your remarkable Potato Seed produced white, pink, red, purple, blue, cream, russet, and black potatoes." W. M. Johnson.

"Your Potato Seed is a wonder. I grew 115 different varieties from one Packet—the finest I ever saw." C. E. Flint.

"I grew 45 pounds of Seedling Potatoes from one Packet. I expect wonders from them next year." Thomas Lucas.

Packet 15 cts. 2 for 25c. 5 for 50c. 10 for \$1.

WRITE FOR QUANTITY PRICES OF SEED POTATOES

CORN SAVER BEET



Fattens Hogs for a Fraction the Price of Corn
A BIG MONEY MAKER. KEEPS HOGS HEALTHY

A MONEY MAKER. In these times of high priced hogs and higher priced corn, it behooves the hog raiser to cast about for a cheaper fattening food for his herd. We offer you this Sugar Beet. It is not an experiment. We have been selling it for the past five years in every state in the Union. If you have not tried it, surely some one in your neighborhood has. We get hundreds of testimonials every year as to its worth as a hog fattener. Before we ever offered it as such we gave it a thorough trial ourselves on our own farm with the result that we named it CORN SAVER. Here are a few figures furnished us on hog raising by customers who have tried the Corn Saver Beet:

By feeding beets exclusively one man made his hogs gain fifty pounds each in one month. He fed 900 pounds of beets per head. At the price of hogs at that time, \$9.50 per 100 lbs., the beets would bring him \$10.55 per ton. Even at the usual fall price of hogs, \$7.00 per 100 lbs., beets fed to hogs would be worth \$7.80 per ton. Another party bought three tons of sugar beets for \$12.45; he fattened eight hogs, which, for a little over two months' feeding, gave him a profit of \$43.00. In this instance the beets were cooked before being fed to the hogs. In both of these cases beets only were used, while by adding a small amount of grain these profits may still be increased.

HOW TO FEED. We began feeding our hogs 1-3 corn, 1-3 alfalfa and 1-3 of the new CORN SAVER BEET. The amount of alfalfa hay and corn can be reduced from time to time until you will not have to average more than one small ear of corn to each hog, with very little alfalfa hay and the balance CORN SAVER BEET. Give them all they can eat and the hogs will get rolling fat and healthy. Our experience proves we have struck something that will make the profit on hog raising several times greater than heretofore and believe will entirely do away with hog cholera.

YIELD. Our largest yield was close to 60 tons per acre. The beets grow very large, frequently weighed 28 lbs. They grow about half out of the ground and are thus very easily harvested. They are two or three times as large as the regular factory sugar beet and are much better for stock. Very hardy. Will grow anywhere other beets will.

AMOUNT TO SOW. It is an easy matter to raise these CORN SAVER BEETS. Simply sow on deeply plowed soil 10 lbs. to the acre, from April to June, in rows 18 inches to 2 feet apart. Thin plants to 8 inches in row—transplant young plants to fill vacancies. Cultivate thoroughly with a five-tooth cultivator or an ordinary one-row corn cultivator and you will have one of the largest money making crops you ever raised. Beet hulls are thick. If it is dry soak seed 24 hours in water before planting.

Price, pkt. 5c; oz. 15c; 1 lb. 50c; 1 lb. 90c; postpaid. By freight or express, 5 lbs. \$4.00; 10 lbs. (enough for 1 acre), \$7.50.

New Mangels For Feeding Stock

DANISH SLUDSTRUP

Long, reddish-yellow; grows well above the ground and easy to pull. The mangel is very large, frequently weighing from 15 to 20 lbs. each. It has repeatedly been awarded a first class certificate by the Danish Government, and is doubtless the best mangel in the world. No other crop can match it. Price, oz. 15c; 1 lb. 35c; 1 lb. 90c; postpaid. By freight or express, 5 lbs. \$4.00; 10 lbs. \$7.50.

DARK RED GIANT ECKENDORF

Is of cylindrical form and grows mostly above the surface and, like the Sludstrup, is very easy to pull. It has been awarded first-class certificate by Danish Government for its merits as a very heavy cropper, a farmer there having grown 58 tons on one acre. Price, oz. 15c; 1 lb. 35c; 1 lb. 90c; postpaid. By freight or express, 5 lbs. \$4.00; 10 lbs. \$7.50.



Mangel, Danish Red Giant Eckendorf

FULL LIST OF BEEKEEPER SUPPLIES, SEE PAGES 106-114

Mangels for Stock Feeding--Continued

140 to 150 days required from sowing to maturity. One ounce will sow 100 ft. drill, 6 pounds per acre



Klen's Wanzeben
Sugar

KLEIN'S WANZLEBEN SUGAR BEET

This is considered the most desirable variety for sugar it is also desirable for feeding stock. The roots, while rather shorter than some varieties, are thicker in diameter, and yield an immense crop on rich land. The largest diameter is at, or just below the surface of the soil, then tapering rather quickly. Seed crop very doubtful. Oz. 10c; $\frac{1}{4}$ lb. 35c; lb. \$1.00; postpaid. 10 lbs. \$8.50; by express.

RIVENHALL GIANT YELLOW GLOBE

This is the cleanest growing, heaviest cropping and longest keeping globe variety in cultivation. Notwithstanding its great size, it produces only a small top with a single tap root.

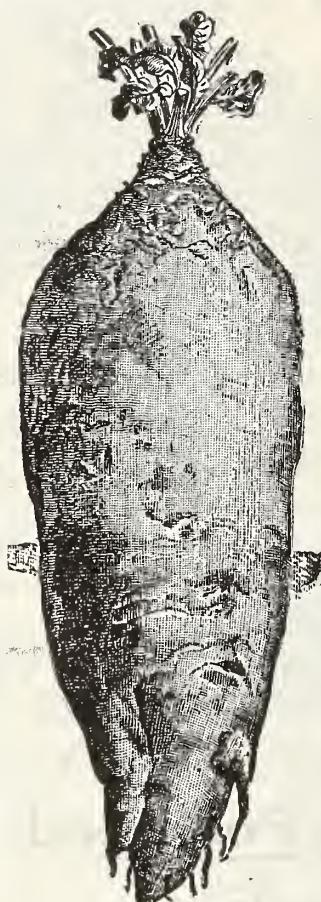
LANE'S IMPERIAL SUGAR

This beet grows to a large size, will yield almost as much in bulk as the best mangels, and contains a large percentage of sugar. The roots are smooth, broad at the shoulder and gradually taper to the base. They grow with a considerable portion above the soil, and are easily harvested. Gray top, whitish-green skin, with crisp, snow-white flesh.

PRICE ON ALL ABOVE MANGELS AND SUGAR BEETS EXCEPT KLEIN'S WANZLEBEN

Ounce 10c; $\frac{1}{4}$ lb. 25c; lb. 90c; postpaid. By freight or express, 5 lbs. \$4.00; 10 lbs. \$7.50.

The simplest method of keeping root crops in good condition for winter use—store in cool cellar in boxes, etc., and cover with dry sand or fine soil, thus excluding the air. They will keep as solid as when freshly dug, and are ready for use at any time.



Red Mangel Worzel

GIANT HALF SUGAR MANGEL

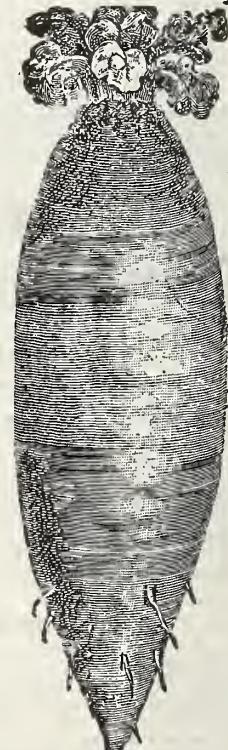
The roots of this new mangel are more valuable, pound for pound, than those of the best strain of sugar beet, supplying food of very much higher nutritive value and not only are they of better quality but they yield more than twice as much. The roots grow partly out of the ground, which renders the harvesting of the crop very easy. Every progressive farmer should try this new food.

GOLDEN TANKARD

A superior strain of golden fleshed mangel; root half long and very large. It is particularly rich in milk-producing qualities. Is very easily pulled; exceedingly hardy.

MAMMOTH LONG RED (Dignity)

This is truly a mammoth, a single root often weighing 30 pounds. Enormously productive, smooth and regular in shape, with a small top. They grow half above the ground, and are easily harvested.



Lane's Imperial Sugar

MARKET GARDENER PRICES ON SEEDS, SEE COLORED SHEET



RAPE

Sow
Five
Pounds
to
the
Acre

Dwarf Essex

Produces feed in from six to ten weeks from sowing. Grows two to four feet high. Produces from 25 to 30 tons of green fodder to the acre.

This is an ideal sheep feed, easily grown; perfectly hardy and possesses remarkable fattening properties. One acre will pasture 36 head of sheep two months and lambs will make a gain of 8 to 12 pounds a month. Pigs and cattle are also very fond of it. It is a rank grower and should have heavy manuring as well as high cultivation. Any corn soil will grow Rape. Sow the seed by the end of June and the crop can be ready to feed at a season when it is most needed. It does well sown with oats. After oats are cut the Rape grows rapidly. If the soil is rich and clean, sow broadcast; if not so clean, sow in drills and cultivate as for corn. When sown broadcast use 5 lbs. and if in drills 2 lbs. to the acre. True Dwarf Essex Rape, our own importation. Prices, Genuine Imported. **Dwarf Essex Rape, per lb., 30c; postpaid. By freight, per lb., 20c.** For quantity prices, see colored sheet.

FIELD PEAS

CANADA FIELD PEAS (60 lbs. to bushel.) With oats 1½ bu. per acre, 2 bu. per acre if alone. Very valuable for cattle feeding. Excellent for horses and pigs when sown with oats. Farmers will find it very profitable to sow these peas with oats for feed. We have a splendid grade of Northern grown fancy seed. Sow broadcast and harrow in. Price, 25c lb.; postpaid. By freight, 18c per lb. For quantity prices, see colored sheet.

COW PEAS.

Highly recommended to plant with oats or kaffir corn, increasing the fertility of the soil for the succeeding crop and leaving the ground mellow and clean from weeds. Do not plant until the weather has become warm; sow 2 bushels if alone and 1 bushel if with other seeds.

WHIPPORWILL. Early, bunch-growing variety, Per lb. 20c; postpaid. By freight, 10c per lb.; For quantity prices, see colored sheet.

NEW ERA. An early variety. Maturing seed in from 80 to 100 days. Probably the best sort for North and West. Can be sown after wheat is taken off the ground and still produce a good crop of forage or peas. Prices, by mail, 20c lb.; postpaid. By freight, 10c per lb. For quantity prices, see colored sheet.

SOJA OR SOY BEANS

A valuable legume somewhat on the order of cow peas, is coming more and more into use. We call special attention to our Northern grown seed which we offer this year. Price, per lb., 20c; postpaid. By freight, 15c per lb. For quantity prices, see colored sheet.

VETCHES

WINTER VETCH. (*Vicia Villosa*) The Winter Cover Crop. Also called Sand or Hairy Vetch. Is a hardy legume sown in Northern States in the fall months; growing well that season, and remaining green all winter. It supplies a place in the North that the less hardy crimson clover does in the South. As a winter cover crop, it prevents washing or leaching of soil during the winter, and at the same time a nitrogen gatherer it enriches the soil. Vetch also furnishes a very valuable hay or pasture. Drill for cover crop 10 to 20 lbs. per acre. For the hay use 1 bu. Price per lb. 40c; postpaid. By freight per lb. 30c. For quantity prices, see colored sheet.

SPRING VETCH or TARES (*Vicia Sativa—Oregon Vetch*). Sown broadcast at rate of 1 to 1½ bushels to acre like wheat or barley and sometimes mixed with oats, for soiling. Valuable for orchard. Used in France and Canada as a substitute for peas. Culture same as field peas. Price, per lb. 30c; postpaid. By freight per lb. 20c. For quantity prices, see colored sheet.

Griswold's Ready Quick Hog Pasture Mixture

Good for one season only

Our annual "Ready Quick" Hog Pasture Mixture is good for one season only. It is especially good for hogs but equally desirable for cattle, sheep, calves and cows. It contains 14 different grains and forage plant seeds, practically all of which grow again if fed down.

Griswold's "Ready Quick" Hog Pasture Mixture can be sown early and be ready to pasture in 6 or 8 weeks and should be in the finest kind of condition in July or August, just when your other pastures are dried up. It can also be sown in July or August and used as a Fall pasture.

We recommend sowing 50 lbs. to the acre, and if your ground is very rich and strong we would say sow 75 to 100 lbs. and by all means keep it fed down, as the stock eat it better when it is young and tender. Be sure and give this valuable Mixture at least a small trial, as you cannot possibly make any mistake by sowing it.

Price, 50 lb. (for 1 acre), \$3.25; 100 lbs. \$6.25; 500 lb. lots or over, \$6.00 per 100 lbs. In less than 50 lb. lots, 8c per lb., or 15c per lb.; postpaid.



PRICES OF FIELD SEEDS SUBJECT TO MARKET CHANGES



Alfalfa

This year we are quoting prices of all grass and almost all field seeds by the pound instead of by the bushel.

Alfalfa is comparatively a new plant in America, but is as old as the hills in many parts of the world. It was first introduced into this country by the Spaniards to California about 1855. At first it was slow in becoming disseminated among the farmers and ranchmen, but step by step it has made its way eastward until now it has become extended all over the Pacific states and east to the Mississippi, in fact, it has been successfully tried in about every state in the Union and "has made good everywhere" until now it can positively be asserted that Alfalfa can be successfully grown everywhere that Red Clover will grow and in many places where it cannot be grown at all.

Alfalfa is a perennial plant of upright growth, growing sometimes 3 feet high. The nature of the leaves is somewhat like clover, although not as large. The flowers are a purplish blue and appear in sprays. The seeds are small, yellowish green, kidney shaped of about the size of a pin head.

SUITABLE SOIL. Alfalfa makes a strong and rapid growth on well drained, rather heavy land, which is supplied with some lime, and where the subsoil, while not necessarily sand or gravel, is porous. On sandy soil the growth is vigorous, when moisture is abundant, but during drought it will suffer unless the roots reach water at a depth of 8 to 10 feet. The land should slope some, as alfalfa will not stand surface water.

SEED BED. The land must be free from weeds and the ground must be thoroughly pulverized and well packed. Alfalfa will frequently fail if seeded on freshly plowed ground. If it is necessary to plow the ground before seeding, do it early, harrowing thoroughly and sow after a good rain has settled it.

SPRING SEEDING. Sow seed broadcast or with drill from March to June 15, at the rate of 20 pounds to the acre.

FALL SEEDING. Disk oat and wheat land as soon as the crop is cut, and then harrow or disk every 10 days until a suitable time for sowing before the 15th day of September when you can sow as above. Cut for hay the next fall. This is the best time to sow for all except Northern states, if you are sure of getting fall rains soon enough.

TURKESTAN. This is the same variety as the common alfalfa, but has been grown for years in the mountains of Turkestan, Asia, in a region where there is very small rainfall and with hot, dry summers, and dry, cold winters. A plant developed under such conditions could not be otherwise than hardy and strongly drouth-resistant, and such has proved to be the case.

ASK FOR ALFALFA BOOKLET FREE. TELLS ALL ABOUT ALFALFA.

NEBRASKA GROWN SEED. We are right in the center of the largest Alfalfa seed growing district in the United States. Nebraska grown Alfalfa seed has gained for itself a reputation of which we are proud. If you live east of the Missouri River we would advise you to INOCULATE your Alfalfa seed with bacteria before sowing. In the west where there is more sunshine it is not so necessary.

ALFALFA SEED PRICES

Pr. lb.

Alfalfa, Lincoln brand, 99.75% pure.....	\$.30	For quantity prices, see colored sheet
Alfalfa, fancy.....	.25	For quantity prices, see colored sheet
Alfalfa, Turkestan.....	.30	For quantity prices, see colored sheet

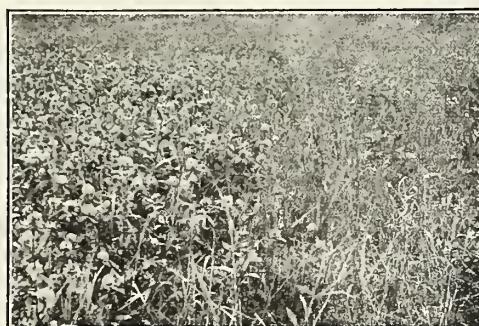
When you are ready to buy ask us for prices and give the amount of seed you will need. We have cheaper grades than listed above and they will give good satisfaction. Get our prices and samples.

ALL FIELD SEEDS SUBJECT TO MARKET CHANGES

Griswold's Lincoln Brand Inoculating Bacteria



INOCULATED



INOCULATED—NOT INOCULATED

NOTE: From these photographs you can see the advantage of inoculation. You will be surprised how much it will better your crop.



NOT-INOCULATED

GRISWOLD'S LINCOLN BRAND INOCULATING BACTERIA. Is a pure culture of growth of Nitrogen Fixing Bacteria that have been selected and bred up to transform large amounts of nitrogen from the air so that plants can use it.

INCREASED CROPS

Are well established facts in all instances where inoculation is used. Not only is the crop increased in weight but in its richness. The United States Department of Agriculture, Bulletins No. 71 and 323 substantiate these statements.

ALFALFA, RED, ALSIKE AND CRIMSON CLOVER, SOJA BEANS, VETCH, PEAS, BEANS, SWEET PEAS, ETC.

yield earlier, larger and better when inoculated.

Griswold's Lincoln Brand Inoculating Bacteria is delivered to you in bottles ready for use. You can inoculate seed for 10 acres in 10 minutes greatly increasing your crop at a very small cost. We have a complete booklet on inoculation and growth of legumes that we will be pleased to send free on request.

OUR PRICES

ALFALFA AND ALL CLOVERS

		PEAS, BEANS, VETCH, ETC.	
Size	Garden size		\$0.88
1-acre, for 15 lbs. seed	1-acre size, for 90 lbs. seed		.50
2-acre, for 30 lbs. seed	2-acre size, for 180 lbs. seed		.95
4-acre, for 30 lbs. seed	4-acre size, for 360 lbs. seed		1.35
6-acre, for 90 lbs. seed	6-acre size, for 540 lbs. seed		2.00

The prices that we are selling our Inoculating bacteria are very cheap, lower, in fact, than we have ever heard of anyone selling Inoculating bacteria. Not only is it cheaper in price but the quality is of the best. The following prices put this in the reach of every farmer and home gardener.

When ordering state what plant you wish it for. Directions are on each bottle.



FERTILIZING BACTERIA

PROCESS PATENTED

ALL CROP FARMOGERM is what we have been wanting for a long time, it is the only Legume Inoculation we know of which carries over 37 different strains of bacteria and will inoculate any legume crop. Results will equal and surpass those obtained by using any other dry medium culture on the market.

ALL THE DIFFERENT STRAINS OF LEGUME BACTERIA IN A SINGLE CAN—ONE CAN TREATS ALL SEEDS

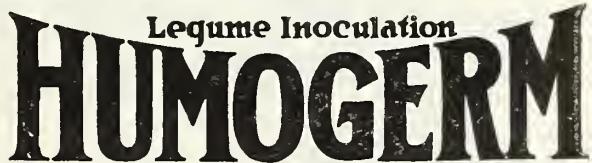
Will Last Two Years. Because of the superior knowledge and skill in manufacture, gained by years of experience ALLCROP FARMOGERM will be alive and active at the end of two years. Most cultures of this character cannot be guaranteed beyond six months.

In addition to furnishing satisfactory inoculation for legume crops ALLCROP FARMOGERM also contains bacteria which fix nitrogen in the soil independently, therefore it is Good for Any Crop.

FIELD CROP, FRUIT, GARDEN CROPS, VEGETABLES, FLOWERS

PRICES

1-acre size can.....	\$1.00 postpaid
5-acre size can.....	4.00 postpaid



A COMPOSITION CONTAINING NITROGEN-FIXING BACTERIA FOR LEGUME SEED INOCULATION.
A COMPOSITION CONTAINING NITROGEN-FIXING BACTERIA FOR LEGUME SEED INOCULATION
The following directions will apply on the different inoculating bacteria:

DIRECTIONS FOR SEED INOCULATION

Pour the contents of the can onto the seed and keep adding a little water and stirring the seeds very thoroughly until they are all slightly moistened, then dry them by spreading evenly on a clean floor. Plant immediately after they are dry enough to handle. Some prefer to inoculate the soil so we also give

DIRECTIONS FOR SOIL INOCULATION

Take about three hundred pounds of loamy or sandy soil, spread on hard ground or on a clean floor to a depth of several inches and sprinkle evenly over it the nitrogen Bacteria, then mix thoroughly for a few minutes and spread the soil evenly over the field and harrow it soon.

CAUTION

Keep can in a cool place. Use only for crop named on label at time of sowing. Keep seed and can away from sunlight.

Made up in the following mixtures or composite cultures:
No. 1—Good for Red, White, Crimson, Alsike and Mammoth Clover.

No. 2—Good for Alfalfa, Burr, Clover and Bokhara.

No. 3—Good for Vetches and Peas.

No. 4—Good for Cow Peas and Soy Beans.

No. 5—Good for Peas, Beans and Sweet Peas

or for any of these crops in separate cultures.

Be Sure to Mention Crop When Ordering

SIMPLE TO APPLY—INEXPENSIVE TO BUY
1 Acre Cans \$1.00; 5 Acre Cans \$4.50, Postpaid

Our Clover Seeds are of the Highest Quality
and Thoroughly Cleaned and Tested

CLOVERS

60 lbs. to Bushel. Sow 20 lbs. to Acre.
FOR SCARIFIED CLOVER SEED ADD \$1.00 PER BUSHEL TO PRICES BELOW

Every farmer should have some land sown to clover. It is of the greatest value for plowing under for supplying humus and nitrogen, greatly enriching the soil and increasing the following crop yield from 20 to 40%.

MEDIUM RED. (Common, or June Clover.)

This is by far the most important of all the varieties for hay or pasture. Sow in Spring or Fall, and if no other grasses are used, at the rate of 8 to 12 pounds per acre. This clover is a biennial, and at best only lasts three years unless it is allowed to reseed itself, which should be done every two years. Price, Fancy, per lb. 40c; postpaid. By freight, per lb., 30c. For quantity prices, see colored sheet.

MAMMOTH RED. (Saplin, or Vine Clover.)

Quite distinct from Common Red Clover. It lasts longer and is two or three weeks later than the Common Red Clover, grows from 3 to 5 feet high and yields an enormous amount to the acre, especially valuable for hog feed and for plowing under green on worn out lands. Sow 12 lbs. to acre. Price, per lb., 45c; postpaid. By freight, per lb., 35c. For quantity prices see colored sheet.

and wet. We advise farmers to sow 2 or 3 pounds of this seed with their Red Clover and Timothy. If alone, sow 8 lbs. to the acre. Price, per lb. 40c; postpaid. By freight, per lb., 30c. For quantity prices, see colored sheet.

WHITE DUTCH CLOVER. Best adapted to moist soils, but does well on any land. Sow 8 lbs. to acre. Price, per lb., 85c; ppd. By freight, per lb., 75c. For quantity prices, see colored sheet.

SWEET CLOVER. (Alfalfa's Twin Sister.)

WHITE BLOSSOM or BOKHARA. (Mellilotus Alba.) This lives two years and then dies. It is the variety commonly referred to when "Sweet Clover" is mentioned and is the best for general use.

Sweet Clover is a legume having the same bacteria on its roots that grow on Alfalfa. Consequently it supplies nitrogen to the soil and prepares the way for Alfalfa.

Where to Plant. Valuable for building up worn-out soils. It is not usually advisable to plant it where Red Clover or Alfalfa flourishes, as the crops are commonly more valuable to the grower. However, some are planting Sweet Clover in preference to other pasture crops.

It grows in a variety of soils—heavy, light, wet or dry, almost anywhere except in acid soil. But it does best on a firm, well drained soil which is rich in lime. The Montana Experiment Station recommends it for improving Alkali soils. It is a splendid green manure crop for plowing under as it supplies so much humus and nitrogen to the soil.

Culture. Sow the seed at the rate of 15 to 20 lbs. per acre with a nurse crop of grain or alone, in well prepared fields in April or May. Cover the seed very lightly. It may follow a cultivated crop by preparing the seedbed with surface-working implements. If the soil is plowed, this should be done several weeks before seeding.

Price, hulled seed per lb., 45c; postpaid. By freight, 5 lbs. \$1.75; 10 lbs. \$3.25. For quantity prices see colored sheet.



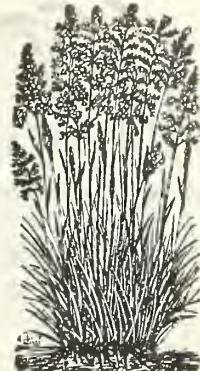
Sweet Clover

PRICES ON ALL GRASS SEEDS SUBJECT TO MARKET CHANGES

Grasses

KENTUCKY BLUE GRASS

This valuable grass is very productive, usually early and very desirable as a pasture grass. It comes in the spring and with a few rains during the summer will make good pasture until late fall. It is surprising how well this grass does in the West, even during the dry season. It is very desirable for lawns. Price per lb. 40c; postpaid. By freight, per lb. 30c. For quantity prices, see colored sheet.



Kentucky Blue



Meadow Fescue

MEADOW FESCUE OR ENGLISH BLUE GRASS

14 lbs. to bu. Sow 21 to 26 lbs. per acre.

Hardy and very valuable for good feed and pasture. Starts early in the spring and lasts until November and December. Just the grass for permanent pasture or meadow.

Meadow Fescue grows luxuriantly, the blades being broad, tender and nutritious, and springs up quickly after cropping. It starts early in the spring, affording most excellent grazing by March 20 or 30, and in the fall will frequently keep cattle fat until late in November. For hay it should be cut soon after the blossoms fall.

Sow broadcast, 21 to 28 pounds of seed per acre on a well prepared bed, and harrow once lightly to cover the seed. On moist or wetish (not too wet) and on gumbo land the plant flourishes wonderfully, yields the heaviest and holds on more tenaciously than anywhere else. Plant good, clean seed. Cheat looks very much like Meadow Fescue. If you buy from us you are sure of getting the pure seed. Price, per lb. 35c; postpaid. By Freight, 28c. For quantity prices see colored sheet.

ORCHARD GRASS

14 lbs. to the bu.; 1½ to 2 bu. per acre

Because of its rapid growth orchard grass is one of the most valuable and popular of our domestic grasses. It is hardy and may be grown anywhere in the United States, except the extreme South and the arid regions of the West. It is a very hardy perennial vigorous grower and does as well in shade as in sunshine. It is about two weeks earlier than timothy and one of the last to succumb to frost in the fall.

Orchard Grass will stand repeated pasturing and mowing, makes from 2 to 6 tons of very nutritious hay. In many sections it may be grazed throughout the winter. It resists drouths remarkably well, and will succeed in any soil or climate where other grasses will grow.

The tendency of Orchard Grass to grow in tufts may be overcome by thorough preparation of the ground and liberal seeding or sowing with other grasses. It may be sown with good results at most any time from January to September, inclusive. Sow (if alone) 1½ to 2 bushels per acre.

Price, per lb., 35c; postpaid. By freight, 30c per lb. For quantity prices, see colored sheet.

JOHNSON GRASS

As a meadow or hay grass this variety is highly esteemed in the South and during the hottest and driest season it can be depended on to yield heavily. It is hard to get rid of when once started and for this reason it should not be allowed to get started in cultivated lands. Price, per lb., 30c; postpaid. By freight, per lb., 20c. For quantity prices, see colored sheet.

CANADA BLUE GRASS

This is the blue grass of Canada, New York and the New England states. It does better on poor, clayey, thin soils than on rich land. It is smaller, grows closer to the ground and stands cold and drought better than Kentucky Blue Grass. Has a very blue color and flattish stems. Very nutritive and really a valuable grass. Not desirable for lawn. Price, per lb. 30c; postpaid. By freight, per lb., 20c. For quantity prices, see colored sheet.



Orchard Grass

PRICES ON ALL GRASS SEEDS SUBJECT TO MARKET CHANGES

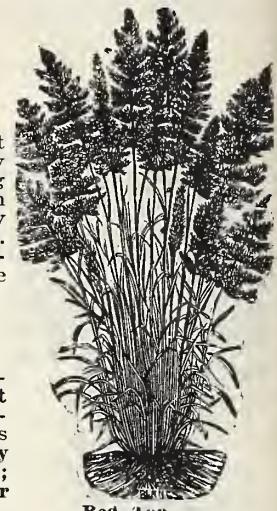
Grasses--Continued

ENGLISH OR PERENNIAL RYE GRASS

This grass is considered invaluable for permanent pasture grass. Produces an abundance of remarkably fine foliage and soon forms a compact sod. After being cut it grows quickly and remains bright and green through the season. It is also a good variety for hay if cut when in blossom, as it is then most nutritious. Flourishes best in moist soil. Price, per lb., 25c; postpaid. By freight per lb. 20c. For quantity prices, see colored sheet.



Timothy



Red Top

RED TOP

Valuable either for mixing in hay or permanent pasture grass. Succeeds almost everywhere but does best in moist, rich soil. It is being sown with Alsike in Western Nebraska, with a great deal of satisfaction. It is often sown with Timothy and Clover. Price, Fancy hulled, per lb., 25c; postpaid. By freight, per lb., 20c; Fancy unhulled, per lb. 20c; postpaid. By freight, per lb. 15c. For quantity prices, see colored sheet.

TIMOTHY

This grass is used exclusively for hay and does well on most any soil. Sometimes grows to the height of 4 feet on rich loam. It is exceedingly nutritious, particularly when ripe. This grass is also used for pasture. It is, however, better for hay and is sown mostly with Red Clover. Price, per lb., 20c; postpaid. By freight, per lb., 12c. For quantity prices, see colored sheet.

BROMUS INERMUS

Grows in Dry, Semi-Arid Regions. Very Resistant to Drought and Freezing. Lengthens Season of Green Pasture. 14 lbs. to bu. Sow 20 lbs. per acre.



Bromus Inermus

Nebraska Experiment Station says: This is one of the principal grasses grown in the dry and semi-arid regions of Russia and Siberia. It starts very early in the spring, and continues growth until late in the fall. Brome grass spreads by means of underground rootstalks. As a hay crop, the grass usually furnishes good cuttings for two or three years, sometimes cutting three tons of cured hay per acre, after which the sod becomes so root-bound that the grass does not grow tall enough for hay (this can be overcome by disking) but will furnish the best pasture for several years.

For Bromus Inermus seeding the soil should always be in fine tilth and well packed. For spring sowing, a piece of fall plowing is most easily prepared and furnishes an almost ideal seed bed. If the land is plowed just preceding the sowing, it should be thoroughly worked down with disk and smoothing harrow until a fine, firm seed bed is made.

TIME TO SOW BROME

If plenty of moisture is present it is best to sow in the fall, otherwise it is better to sow in the spring. It is sometimes sown with winter wheat. It is recommended to sow with alfalfa where the latter is to be used as pasture. Price, per lb. 35c; postpaid. By freight, per lb. 25c. For quantity prices, see colored sheet.

When in the market for grass and field seed, write for our latest price list, some kinds may be cheaper.

Grass Mixture

MIXTURE FOR HOG PASTURE. This will be considered very heavy seeding and expensive, but if you have a hog pasture for keeps, you cannot afford to skimp on seed or limit the varieties. Alfalfa, Mammoth Clover, Red Clover, Alsike Clover, White Clover, Timothy, Blue Grass, Orchard Grass, Meadow Fescue. 25 lbs. per acre, for \$4.75; per 100 lbs., \$18.00. Write for prices in larger lots.

MIXTURE FOR HIGH LAND. Good for pasture and hay. Brome Grass, Meadow Fescue, Orchard Grass, Timothy, Alfalfa and Red Clover mixed in proper proportions. Price, 20 lbs. per acre, \$3.75; per 100 lbs., \$17.50.

MIXTURE FOR LOW, DAMP SOIL. Can be cut for hay but better for pasture. Kentucky Blue Grass, Red Top, Meadow Fescue, Alsike Clover, English Rye Grass and Timothy. Price, 20 lbs. per acre, \$3.00; per 100 lbs. \$12.50.

UNIVERSITY GRASS MIXTURE. This is a special mixture recommended by the University Experiment Station as the best for pasture. We mix it in the right proportion and use only the very best grade of seed. Brome Grass, Meadow Fescue, Orchard Grass, Alfalfa. Price, 24 lbs. per acre, \$5.25; per 100 lbs. \$20.00.

PRICES ON ALL GRASS SEEDS SUBJECT TO MARKET CHANGES



Millet

SIBERIAN

(Also called Red German, Dakota and Early Russian Millet.) It is from 2 to 4 weeks earlier than German millet, and can be cut for hay in 60 days from planting. The blades are wide, the straw fine and soft and does not make as much hay as German millet. It stools heavily. Sow $\frac{1}{2}$ bu. broadcast or $\frac{1}{2}$ bu. in drill to the acre for hay, on rich land. Price, per lb., 15c; postpaid. By freight, per lb. 5c. For quantity prices see colored sheet.

HOG OR BROOM CORN MILLET

This is grown for the same purpose for which other millets are sown, but makes inferior hay unless cut very young. It, however, yields enormously of seed, even 60 to 70 bushels to the acre, and this seed is very advantageously used for fattening swine and other stock, and is of special value for this purpose in sections where corn cannot be safely or cheaply grown. Seed also makes very fine feed for poultry and young chicks. It will mature in about two months from sowing the seed. Price, Fancy Reclamed Hog or Broom Corn Millet, per lb., 15c; postpaid. By freight, per lb. 5c. For quantity prices see colored sheet.

TABLE OF WEIGHTS OF GRASS AND FIELD SEEDS

Sowing number of Pounds to the Bushel and amount of Seed necessary for an acre.

	No. Lbs. to Bu.	No. Lbs. to Acre		No. Lbs. to Bu.	No. Lbs. to Acre
Alfalfa	60	15 to 25	Milo Maize	56	4 to 6
Alsike Clover	60	6 to 8	Millet (except as noted)	50	25 to 50
Barley	48	48 to 96	Oats	32	32 to 64
Beans	60	30 to 50	Onion Sets, top	28	
Billion Dollar Grass	40	10 to 15	Onion Sets, bottoh	32	320 to 400
Buckwheat	50	25 to 40	Orchard Grass	14	25 to 30
Broom Corn	46	10 to 12	Pearl Millet	50	5 to 8
Brome Grass	14	25 to 40	Peas, field or smooth garden	60	90 to 120
Blue Grass, Kentucky	14	25 to 30	Peas, wrinkled	56	
Cane in Drills	50	6 to 8	Peanuts	24	24 to 30
Cane, for Fodder Broadcast	50	100 to 150	Pencilaria	50	5 to 8
Clover, Alsike	60	6 to 8	Potatoes, Irish, good measure	60	480 to 600
Clover, Red	60	12 to 15	Potatoes, sweet	50	
Clover, White Dutch	60	6 to 8	Rape	60	5 to 6
Corn	56	8 to 10	Red Top	14	20 to 30
Corn on Ear	70		Red Clover	60	12 to 15
Cow Peas	60	60 to 90	Rye	56	72 to 90
English Blue Grass (Meadow Fescue)	22	21 to 28	Rye Grass, English or Perennial	24	50 to 60
Flax	56	28 to 42	Speltz, or Emmer	48	80 to 120
Hemp	44	30 to 60	Sweet Clover	60	6 to 8
Japanese Millett	40	10 to 15	Timothy	45	15 to 20
Johnson Grass	25	25 to 50	Wheat	60	60 to 90
Kaffir Corn	56	50 to 100			

Millets**GERMAN MILLET**

This grows very rank and is one of the best varieties for hay on account of being so sweet, palatable and milk-producing. On good, rich soil it will make a growth of 4 to 5 feet, and although the hay may seem coarse, yet it is so tender that if cut at the right stage, which is when in full bloom, even the hogs will eat the cured hay quite greedily. A yield of five tons of hay per acre is nothing unusual. Sow three pecks per acre. Price, per lb., 15c; postpaid. By freight, per lb., 5c;

HUNGARIAN MILLET

In the Northwest no other variety is so well known and so much grown for hay as the Hungarian Millet. It is so valuable because it requires such a short season to make a fine crop of the most nourishing and milk-producing hay. On this account it is the best catch crop when other crops, already put in, for some reason fail to grow. In many localities where early potatoes are grown for the market Hungarian is sown for a second crop as soon as the potatoes have been harvested. Hungarian does not grow as coarse as many other Millet varieties, but yields heavily, three to four tons of hay per acre being an ordinary crop. The hay is quite leafy, and is greedily eaten by all kinds of stock. For hay sow 3 pecks per acre. Price, per lb., 15c; postpaid. By freight, per lb. 5c. For quantity prices see colored sheet.

PENCILARIA OR PEARL MILLET

It grows luxuriantly on any soil suitable for corn, especially on rich land, where it will grow 10 to 12 feet high, but cutting should commence when 2½ to 5 feet. After being cut it will stool out enormously, become thicker and during the warm weather grow with marvelous luxuriance. Does well on poor soil. Very desirable in districts subject to drought as it continues to grow in dry weather. Sow 2 to 3 lbs. per acre in drills 3 feet apart. Do not plant until warm weather. Price, per lb., 25c; postpaid. By freight, per lb., 15c; per lb. 25c; postpaid. By freight, per lb.. 15c. For quantity prices see colored sheet.

JAPANESE BARNYARD MILLET

(Called "Billion Dollar Grass," owing to its high value.) Its greatest value is for green fodder, of which it yields 3 to 5 tons per acre. It is excellent for cows, producing more milk than corn fodder. It grows 6 to 8 feet high, and produces 50 to 90 bushels of seed per acre. It should be sown the latter part of May, 10 pounds per acre. Price, per lb., 18c; 3 lbs., 50c; postpaid. By freight, per lb. 8c. For quantity prices see colored sheet.

COMMON MILLET

Price, per lb., 15c; postpaid. By freight, per lb. 5c; For quantity prices see colored sheet.

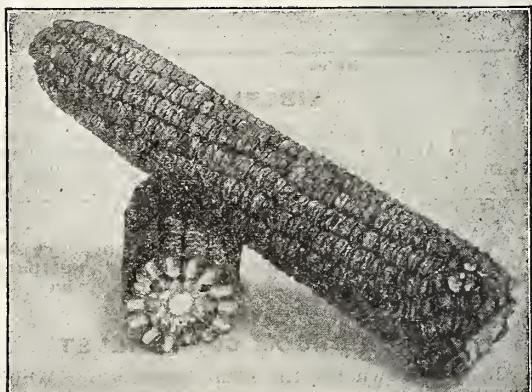
ALL FIELD SEEDS SUBJECT TO MARKET CHANGES



Good seed is primarily essential in the production of good crops. An ear of average Dent Corn contains about 800 grains, which is sufficient to plant 160 hills with 5 grains each, or more than enough to cover one-half acre if the hills are $3\frac{1}{2}$ feet apart each way. From this it is easily seen that the loss to a farmer would be considerable if he planted but one bad ear of seed to a field. Our seed corn is butted and tipped and tested for germination before being sold.

UNIVERSITY NO. 3

We are indeed pleased to be able to again catalog this once most popular of early corns. The past two years we were not able to furnish pure seed and did not offer any for sale, but this year we found a grower who had kept it pure, so we offer it again. It is the earliest large Dent Corn grown on the market today. Was originated by the University of Nebraska some years ago to fill a long-felt want for an extremely early corn. Price, pkt. 5c; pt. 15c; qt. 25c; postpaid. By freight or express, pk. \$1.00; $\frac{1}{2}$ bu. \$1.90; 1 bu. \$3.50.



FUNK'S YELLOW DENT, STRAIN 140

This Funk's Yellow Dent is an improvement of Reid's Yellow Dent, and as the same general characteristics. The ears are from 8 to 11 inches long, cylindrical in shape from butt kernels set very close together with no open space between.

University, No. 3

GOLD MINE

The grain is a rich golden, shining like new coin from the mint; dent, long, deep; kernel often over three-fourths of an inch long. This corn will shell more pounds to seventy pounds of ears than any corn we know of. Seventy pounds of Gold Mine on the ear will make 62 to 63 pounds of shelled corn. This is the smallest proportion of cob of any variety.

HOGUE'S YELLOW DENT

This corn is highly endorsed by the State Experimental Station and is one of the very best corns for Nebraska and Kansas. Ears are medium size to large, maturing in about 100 days.

IMPROVED LEAMING

A rich golden dent corn, good sized ears, rich in protein. Owing to the deep, bright color, smooth, tapering ear, and solidity and weight of this corn, it is in high demand by shippers, either for ear corn or shelled. It is a very productive sort, and because of the smooth, even surface, it is much nicer to handle than the rough, hacked sorts.

IMPROVED IOWA SILVER MINE

Silver Mine is the most popular White Corn Grown in the corn belt. It is a pure white dent corn with ears of good size and is inclined to be well over the butts and tips. It is early, yields heavy, has deep grains, stands up well and will probably grow more corn to the acre on thin land than any other variety. It yields enormously on heavy land. The quality is always good and has a great feeding value; the cob is white and of medium size.

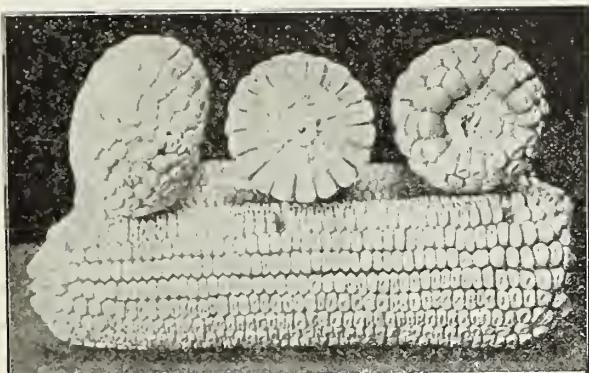


Funk's Yellow Dent

PRICES ON ALL CORN ON PAGES 52 AND 53 EXCEPT UNIVERSITY NO. 3, \$3.00 PER BU.

ALL FIELD SEEDS SUBJECT TO MARKET CHANGES

Seed Corn--Continued



Boone County White

NEBRASKA WHITE PRIZE

Ears are large and well filled at both ends, the white cob being hardly visible. Is medium late, and yields frequently 75 bushels to the acre.

PRIDE OF THE NORTH

This is a well known variety; beautiful, deep dented, fine golden color, 8 to 9 inches long, with small cob and very long and deep kernels. A tremendous sheller. Seventy pounds of ears will pounds of shelled corn. Stalks grow to about 7½ short jointed and leafy; average distance base of ear from ground is 3 feet. Two well developed ears are frequently found on one stalk. Yields 40 to 75 bushels to the acre. Ripens in 85 to 90 days. Is hardy and vigorous.

WHITE CAP BUTCHER

A medium yielder, early red corn with white cap; will mature in 85 to 90 days and be good and sound.

YELLOW FLINT

Similar to White, except color.

Seed corn prices on page 52. Write us for quantity prices.

COMBINED TIPPER

AND SHELLER

This is just the machine you have been looking for. It butts and tips your corn and then shells it. Also has an attachment for shelling pop corn. These machines are well made, extremely handy. You can more than pay for one by shelling and tipping your seed corn and then have it for next year. Price complete, \$1.25.



CORN PLANTERS

No. 1. Good, reliable two-hand planter. Price, by freight or express, \$1.25.

No. 2. Segment one-hand corn planter, adjustable for planting all kinds of corn. Has pumpkin seed attachment, is well made in every way.

Price by freight or express, \$1.50.



No. 1

**FOR OTHER
TOOLS, SEEDERS,
ETC., SEE PAGES
115 to 118.**

No. 2

ALL FIELD SEEDS SUBJECT TO MARKET CHANGES

BOONE COUNTY WHITE

Very best of white corn, of extra large size, good yielder and medium early. Quality is excellent and is particularly adapted for milling purposes, making a fine white meal. Withstands the dry weather and winds remarkably well.

CALICO

That fine, large, variegated corn that always yields well and makes big ears. This corn always gets ripe before frost.

IMPROVED REID'S YELLOW DENT

Has a wide reputation and is endorsed by more experiment stations than any other corn grown. Has heavy stalks with an abundance of blades, making extra fine fodder. It will ripen in 90 to 100 days; will yield from 50 to 80 bu. per acre ordinary farming.

WHITE FLINT

The great feature of this variety is the large grains and small cob it produces. The ears are 12 to 15 inches long, smooth and symmetrical. Kernels are broad and flinty, and white in color. White flint makes a very sturdy and vigorous growth with a great abundance of broad, succulent leaves, and is of great value for fodder and silage as well as grain.

make 60

feet, are

short jointed and leafy;

average distance base of ear from

ground is 3 feet.

Two well developed ears are frequently

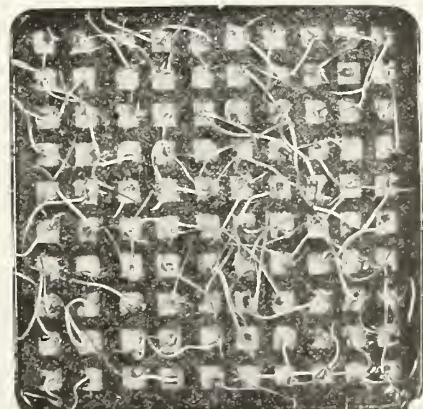
found on one stalk.

Yields 40 to 75 bushels to the acre.

Ripens in 85 to 90 days. Is hardy and vigorous.



The Cover



The Bottom of Tester

Every corn planter should have the above seed tester for testing his seed corn. There are 100 separate apartments in the felt for testing seeds. Requires little attention.



Oats

Kherson

KNOWN AS UNIVERSITY OATS

NO. 1

Hardy and good yielder. Largest yielder in Nebraska, 80 to 112 bushels to acre; two to three weeks earlier than common oats.

Kherson

Swedish Select

Kerson Oats were brought to America in 1900 by the University of Nebraska, located at Lincoln. They originally came from Kherson, Russia, where they were grown as the best early, hardy, good yielding oats in that locality. The University of Nebraska sent out small lots to farmers all over the state and tests proved that the oats far exceeded their highest expectations as to earliness, amount of yield and adaptability to withstand heavy winds and not lodge.

Kherson Oats, when ripe, are a beautiful yellow in color. They have fine large spangled or full heads, which frequently contain more than 100 seeds. The straw is stiff and does not lodge or rust. The leaves are broad, frequently three-fourths of an inch wide. They extend to the roots and are so pliable that they stay on even through threshing. The straw makes an unusually good fodder and is eaten greedily and with profit by all kinds of stock. While the kernel is a little small, the berry, when the hull is off, is extra large. We have never found a grain so small but what it contained a well developed seed. This is not true of the large oats.

Under favorable conditions Kherson Oats have yielded as high as 112 bushels to the acre in Nebraska. At the Experimental Station at North Platte the yield averages about 50 bushels to the acre. In a good favorable year Kherson Oats are three weeks earlier than common oats, thus losing by two weeks the risk of hail and two weeks better chances for a crop.

We have never sold anything that gave such universal satisfaction. Immense amounts are sold in from 3 to 50 bushel lots to almost every state in the Union, and especially Iowa, Illinois, Kansas, Missouri, and Oklahoma. All these states report the yield from 10 to 30 bushels more per acre than Texas Red, Champion and other oats. Customers who bought these oats when we first introduced them are now buying to secure a new start. Buy direct from us and you get the pure seed—no substituting.

Sow on rich soil. Reports show that they do not lodge even on bottom land. They will not give satisfaction on poor soil. Sow $2\frac{1}{2}$ bushels per acre.

If you order only oats, remember the freight will be no more for three bushels than one bushel. We have handled Kherson Oats since its adaptability to our soil and climate has been proven.

Prices, 1 bu. 90c; 5 bu. \$4.25; 10 bu. \$8.25. For quantity prices, see colored sheet.

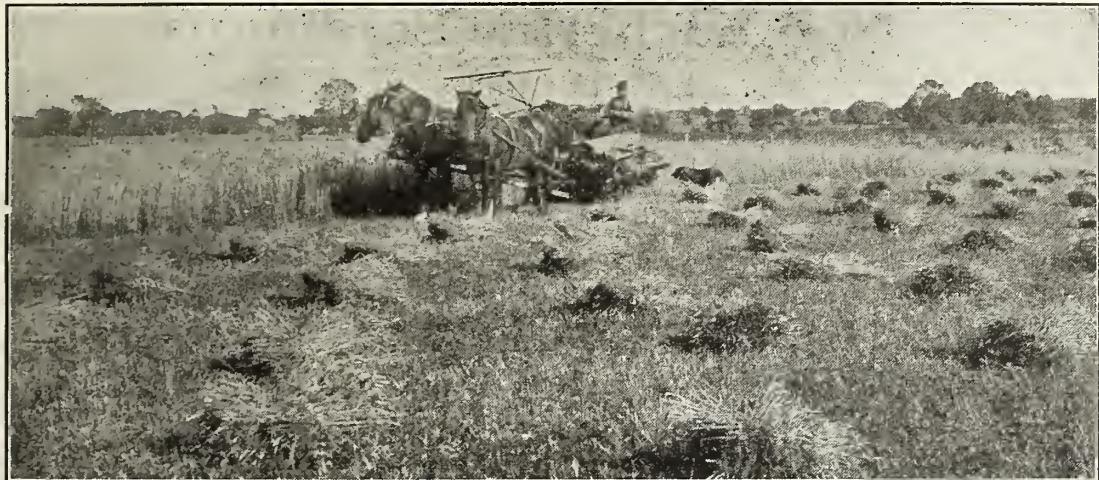
WHITE KHERSON OATS

Just what we have been looking for, an oat with all the good qualities of the Kherson with the additional quality of being white. The White Kherson Oats have been bred up by the University of Nebraska from the original great oat described above. This oat is even heavier than the common Kherson Oats and is a nice, bright white. We fully expect the first year that the sale of White Kherson Oats will exceed the common Kherson Oats and every farmer knows what a great oats the Kherson is. If you are not familiar with the common Kherson Oats read the description above and remember that the White Kherson Oats has all of these good points and is white while the common Kherson is yellow. Send for free sample. Price, lb. 15c; 3 lbs. 40c; postpaid. By freight, 1 lb. 10c; peck 35c; bu. \$1.20; 5 bu. \$5.75. For quantity prices see colored sheet.

GENERATED SWEDISH SELECT OATS

These oats were introduced several years ago. They were "crossbred" by the Garten Seed Company of England, and the system that they used was such that it increased their vitality and put them back to their original standard of high excellence. Under this system the oats were made to weigh 52 pounds to the measured bushel. We had a small lot of these oats planted for us and they yielded a little more than twice as much as common oats under the same conditions. Price, lb. 20c; 3 lbs. 55c; postpaid. By freight, lb. 10c; 1 peck, 20c; peck, 30c; bu. \$1.00. For quantity prices see colored sheet.

ALL FIELD SEEDS SUBJECT TO MARKET CHANGES



Spring Wheat

WRITE US FOR
QUANTITY PRICES

MARQUIS WHEAT

(The World's Champion). Destined to "revolutionize wheat growing in the Northwest." Originated by Dr. Chas. E. Saunders of the Central Experiment Station, Ottawa, Canada, by crossing Red Fife and Red Calcutta, a very early wheat from India, the result being a wheat combining the extreme earliness of the one with the frost resisting and heavy yielding qualities of the other. It is a week to 10 days earlier than Red Fife or any other sort, and yields 5 to 10 bushels more per acre. The heads are very heavy, the stalk stout and shorter than Red Fife. Beardless, except for a few short awns at the top. Price, lb. 25c; 3 lbs. 60c; postpaid. By express or freight, pk. 75c. For quantity prices see colored sheet.

MACARONI KUBANKA WHEAT

This wheat is tall, with broad, smooth leaves. Heads are large, heavily bearded, much the appearance of barley. Kernels are large, very hard, having less starch than common wheat. Largely used in the manufacture of macaroni, and makes excellent flour. The habit of growth adapts Macaroni Wheat to regions of light rainfall. Requires rich soil but will grow in alkali. Reports show a better yield per acre of Macaroni or Durum Wheat than other spring varieties. Sow early in the spring, as it is not easily injured by frost. Prices, by freight, per peck 70c. For quantity prices see colored sheet.

Barley

WRITE US FOR
QUANTITY PRICES

WHITE HULLESS

A valuable variety has large heads, plump kernels, both hulless and beardless and looks like large white wheat. Is two or three weeks earlier than any other barley and an immense yielder. Stools wonderfully; sow only 1½ bushels per acre. Per lb. 15c; postpaid. By freight per lb. 5c. For quantity prices see colored sheet.

COMMON

Succeeds best on lands more sandy and lighter than those adapted to wheat. Sow from 2 to 2½ bushels per acre. Per lb. 15c; postpaid. By freight, per lb. 5c. For quantity prices see colored sheet.

MANDSCHEURI

It is an early six-rowed, bearded variety, maturing 80 to 90 days from the time of sowing; is very strong strawed and stools well, bearing large heads of plump grain, adapted to all kinds of soil and climate. Per lb. 15c; postpaid. By freight, per lb. 5c. For quantity prices see colored sheet.

CHAMPION

It is beardless and nice to handle. Grows tall and stands up well. Straw is good and grows taller than any other variety. Per lb. 15c; postpaid. By freight, per lb. 5c. For quantity prices see colored sheet.

Buckwheat

JAPANESE

This sort has proven to be much earlier and more productive than any other variety. The grains are very large and of rich, brown color. It excels in yield and earliness. Per lb. 25c; 3 lbs. 60c; postpaid. By freight or express, per lb. 6c. For quantity prices see colored sheet.

SILVER HULL

A very good and popular variety. The grain is of light color, is rounder than the common variety, matures earlier, and yields a half more to the acre. Per lb. 20c; 3 lbs. 45c; postpaid. By express or freight, per lb. 6c. For quantity prices see colored sheet.

COMMON

Sown in June, broadcast, at the rate of 2 to 3 pecks per acre. Per lb. 25c; 3 lbs. 60c; postpaid. By express, per lb. 6c. For quantity prices see colored sheet.



Marquis Wheat

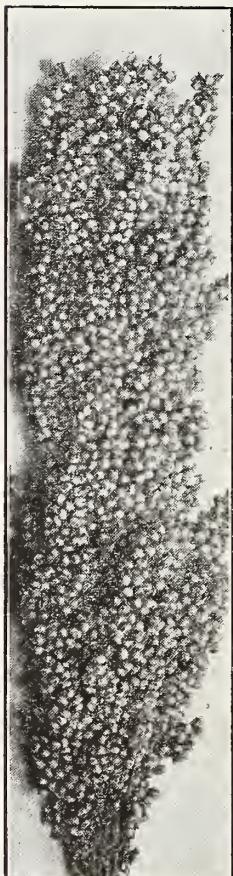
Non-Sacharine Sorghums

KAFFIR CORN

This is the most excellent plant, yielding two crops of fodder during a season. It grows from five to six feet high, making a straight upward growth. The stem, or stalk, bears numerous wide leaves. The stalks keep green and brittle and juicy, making an excellent fodder either green or dried, the seed is fine chicken feed.

It also seeds heavily, sometimes yielding 60 bushels to the acre. Both grain and fodder are excellent. The stalks remain tender to full maturity of seed. There is no failure about it as it possesses the quality that all the tribe possesses, of going without rain without any loss of capacity to yield.

The grain is extremely valuable for feeding to poultry and will make a flour that is like wheat. Cultivate the same as our common Indian corn, requiring five pounds of seed per acre. For fodder sow one to two bushels either broadcast or in drills. Price, per lb. 15c; postpaid. By freight, per lb. 5c. For quantity prices see colored sheet.



Kaffir Corn

producing all the way from three to six stalks from a single grain, and it is quite a drought resister. The heads grow similar to Broom Corn, forming large heads of round, plump, white seeds. It is an excellent feed for horses and cattle, and especially chickens. It will produce more seed than any of the cane or sorghum family and about double the amount of either Red or White Kaffir Corn. Sow in rows three feet apart, three to five pounds of seed per acre. For fodder, sow half to one bushel either broadcast or in drills. Give it a trial. Price, pkt. 5c; lb. 20c; 5 lbs. 90c; postpaid. By freight or express, at your expense, lb. 10c; 10 lbs. 65c. For quantity prices see colored sheet.



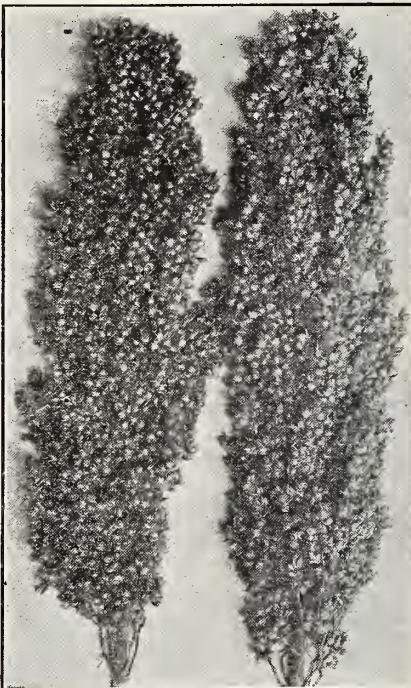
Milo Maize

Milo Maze is an excellent grain for dry regions. It will yield 15 bushels to the acre under conditions so dry that corn will be a total failure. When fed with some succulent feed such as alfalfa, stock beets or sorghum, it makes fine feed for fattening cattle. To prevent waste, Milo Maze should be fed in heads or ground. Plant 4 to 6 pounds per acre in rows and cultivate. Price, per lb. 15c; postpaid. By freight per lb. 5c. For quantity prices see colored sheet.

MILO MAIZE

NEW SHALLU

A NON-SACCHARINE SORGHUM from India, where it is extensively cultivated under the name of "Shallu." It is more valuable than Kaffir Corn for grain, as it yields considerably more seed, it being of stooling habit,



JERUSALEM CORN

The best and surest grain crop for dry countries—even better than Kaffir Corn, Dhoura and Milo Maize. It grows from 3 to 5 feet high, makes one large head on the main stalk, and several smaller ones on the side shoots; well filled with valuable grain for stock and chicken feed. Eight heads sometimes grow on one stalk, the grains are pure white and nearly flat. Three pounds will plant an acre. Price, per lb. 20c; postpaid. By freight, per lb. 10c. For quantity prices see colored sheet.

Sheridan County, April 2, 1917.

Dear Sirs:

We are very much pleased with your seeds, having used them the past two years, and had splendid success with them.

Yours truly,

CLYDE HELLING.

ALL FIELD SEEDS SUBJECT TO MARKET CHANGES

Non-Sacherine Sorghum-Con.

SUDAN GRASS

Sow in drills 2 to 3 lbs. per acre; broadcast 25 lbs.

A new forage crop of immense value to the West.

Possibly the greatest recent discovery in the way of a pasture and forage grass, promising adaptability to all sections of the United States, was made in 1909, when Prof. C. V. Piper, of the United States Department of Agriculture, discovered Sudan Grass in Kartoum, Egypt. Professor Piper brought back a small amount of the seed with him and as early as 1910 it was given a trial at the Government Experiment Station near Chillicothe, Texas, where its ability to withstand a protracted drought attracted attention from all who saw it or heard of it. Since that time it has been grown in many sections of the West and Southwest, and from all directions come reports of enormous yields of seed and hay, in some instances, almost past belief.

SUDAN GRASS is thought to be the wild original form of our cultivated sorghums. Its close cellular construction makes it a plant capable of withstanding droughty conditions. Like Kaffir, it has power to "cell" its sap during extremely dry weather, thus enabling it to live for weeks, often without any visible growth, waiting for moisture. When moisture is received the plant resumes its growth and the crop matures. Sudan Grass is strictly an annual and dies each year.

After cutting it renews its growth promptly when moisture conditions are favorable, and in about 40 to 50 days another cutting is ready. The grass stools abundantly after first cutting and the second and third cuttings are very fine stemmed. Ordinarily two or three cuttings may be expected from the central United States southward, and one cutting north of the middle.

SUDAN GRASS may be planted in cultivated rows, in close drills, or broadcast. It is very susceptible to frost, therefore the seed should not be planted until the ground is warm and the danger of frost is past. It should be planted as soon as safety will permit, however, in order that it may have the maximum growing season, and give the greatest number of cuttings and the heaviest yield of hay.

**Price, per lb. 40c; postpaid. By freight, per lb. 25c.
For quantity prices see colored sheet.**

FETERITA

This is one of the latest in non-saccharine sorghums. A new grain introduced into the United States from British Egyptian Sudan several years ago by the U. S. Department of Agriculture. It belongs to the same family as Kaffir Corn and Milo Maize and resembles these grains in some respects. It produces stalks of medium height with ten to twelve leaves and a large upright seed head, well filled with grain. The plants stool freely producing numerous smaller seed heads.

It matures a crop in 70 days—about three weeks earlier than Kaffir Corn. If the ground is well saturated with moisture at planting time, Feterita will mature a crop without further rainfall and its value to dry sections or to sections having a very short growing season, can hardly be overestimated. It has been known to produce crops of 70 to 80 bushels of grain per acre, but 35 to 40 bushels is considered an average yield.

It may be fed to all kinds of live stock and poultry whole or ground, mixed with other grain or alone, with equally good results as Corn, Kaffir Corn or Milo Maize. **Price, per lb. 15c; postpaid. By freight, per lb. 5c. For quantity prices see colored sheet.**



Sudan Grass

TEOSINTE

95 Tons Green Fodder per Acre

A forage plant that originated in Egypt, and which for a number of years has been grown successfully in the Southern states. It resembles corn somewhat in appearance, but the leaves are much longer and broader and contain sweeter sap. The yield is so abundant that one plant is considered sufficient to feed a pair of cattle for 24 hours. It suckers more than any other forage plant, generally producing 20 to 30 stalks from one kernel of seed, and growing to a height of 11 feet. Can be cut when 2 to 3 feet high and used for fodder, after which it will quickly grow up again. Can be cut two to five times in one season. The forage to be had estimated 300 tons per acre. Can be cut and fed in the green state, or it can be dried and makes a magnificent fodder for cattle during the winter months. Excellent results have been reported as far north as Iowa and southern Minnesota and Wisconsin. **Price, per lb. (will plant 1 acre), 85c; 5 lbs. \$4.00; postpaid.**

ALL FIELD SEEDS SUBJECT TO MARKET CHANGES

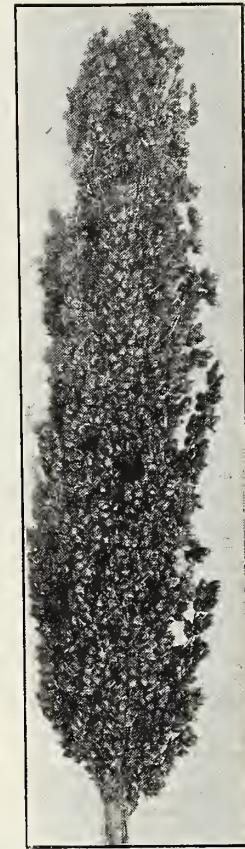
Cane or Sorghum

FEEDING VALUE. It is known quite definitely that an acre of sorghum will produce more food value, more pounds of beef or pork, when properly fed, than an acre of corn. The main use of the crop, however, is for a winter supply of forage, and it has this advantage over corn or any other kind of grain, that it can be sown late. It furnishes fodder in 70 to 90 days and matured seed in about 100 days.

TIME TO SOW. Sorghum may be put in almost any time up to the middle of July. June is the best time. Sow broadcast because the fodder will grow fine, will cure better and will give better results in feeding. Eighty days will produce a very satisfactory crop. Sow 10 lbs. in rows for cultivation, 2 or 3 bu. (50 lbs. to bu.) broadcast per acre for fodder.

THE SOIL. Select the thinnest soil and highest part of your farm for sorghum. On this soil it is not so likely to fall down in seasons of excessive rainfall. Have the ground free from clods and do not plant more than one inch deep except in very light soil.

HARVESTING. Harvest as late as possible to avoid hard frost, in order that the fodder will retain its sweetness and succulence. When sown broadcast cut with a mower and allow to dry for a week or ten days, after which it may be put in shocks weighing about 500 pounds and allowed to stand until fed. Price, per lb. 15c; postpaid. By freight, per lb. 4c. For quantity prices see colored sheet.



Cane or Sorghum

Broom Corn

OKLAHOMA DWARF

46 lbs. to the bushel

Possesses several features of merit which places it at the head of others, viz: Its earliness, dwarf habit (5 ft. high), robust growth, extreme productivity, long, well-fibered brush and its ability to resist drought. Per lb. 20c; postpaid. By express or freight. 25 lb. lots, per lb. 10c. For quantity prices see colored sheet.

IMPROVED EVERGREEN

The best variety for general cultivation on account of color and quality of brush. Price, per lb. 15c; postpaid. By freight, per lb. 10c. For quantity prices see colored sheet.

DWARF

Grows from 3 to 4 feet high, straight brush. Used for making whisks and brushes. Per lb. 15c; postpaid. By freight, per lb. 1c. For quantity prices see colored sheet.

Speltz or Emmer

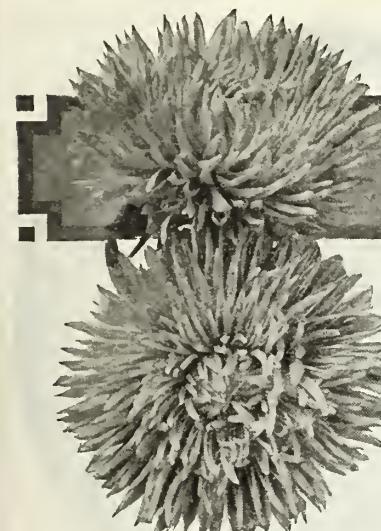
This new grain was first introduced into this country 10 years ago, and has proven of great value. It has become a staple crop in all sections of the West and Northwest and its position in the list of grains is thoroughly established. It is grown and handled in the same manner as barley, though many feeders do not thresh it but feed direct from the stack or shock. It is really better to thresh it as the process breaks up the beards and straw so that the animals eat it more readily. It is a splendid feeding grain, in our opinion second only to corn, and in dry or cold sections where corn will not mature Speltz will be the very best live stock feed that can be produced. It is in the cold and arid regions that it thrives best, and will yield wonderful crops under adverse conditions. Records of 75 to 100 bushels of grain and 3 to 5 tons of straw are reported from Kansas, Nebraska and the Dakotas. It can be used for pasture and hay after the manner of rye, and if sown with field peas will be strictly first quality. Its value lies in its hardness, great yields, and feeding value, and it can be grown anywhere in the corn belt with profit. This grain resembles barley except that it has two berries in each hull. Sow it in place of oats. Grain is just as good for stock. Better than barley for hogs. It is liked by horses, sheep and cattle. Its straw makes feed equal to prairie hay. Price, per lb. 15c; postpaid. By freight, per lb. 10c. For quantity prices see colored sheet.

Seed Flax

It will pay you to sow nice, pure, high-grade flax seed. For several years the available supply has not equaled the demand and prices have been very high. Our seed is thoroughly cleaned, free from mustard or any other weed seed and is as good as can be purchased anywhere. Don't buy flax seed on open market. It is generally full of weed seed. One of the most profitable crops, especially on new land.

Culture. Flax should not be sown on same land oftener than once in seven years. Treating the seed with formaldehyde before sowing is often advisable. Before sowing, the ground should be thoroughly prepared and it is especially important to have the soil well firmed. Be sure there are no open spaces in the bottom of the furrows as these are likely to cause the roots to rot. Sow 25 to 30 pounds per acre; sow as early as possible and yet avoid the last killing Spring frost. Price, per lb. 20c; postpaid. By freight, lb. 10c. For quantity prices see colored sheet.

ALL FIELD SEEDS SUBJECT TO MARKET CHANGES



FLOWER SEEDS

It Will Pay You to Read the Following Carefully

GENERAL CULTURE. A rather light and moderately rich soil thoroughly spaded, is most desirable. That the tiny seedlings may be seen and the weeds removed, it is better to plant all flower seeds in rows. Sow the seed evenly in the rows, cover with the finest of soil, about three times the diameter of the seed, and press the soil firmly over the seed. Keep covered with cloth or paper till sprouts appear. The soil should never become dry after the seeds have been swelled, for if it does, they will be pretty sure to fail. Do not grow the plants too thick. Keep the weeds down and the surface of the soil well stirred with a hoe or rake during the summer especially if the weather is dry. A great many varieties can be sown in the house, if desired, early, and afterwards transplanted. Most plants will continue to bloom much longer if the flowers are picked, and not allowed to form seed.

Discount: Any 6 of our Large 5c Packets for 25c.

Seeds of Annuals

In this department we include both annuals that bloom and die the first year, and such perennials as flower freely the first year.

For Other Vines, see page 66.

For Perennials, see pages 79 to 85.

FLOWER SEED—ALL PRICES POSTPAID

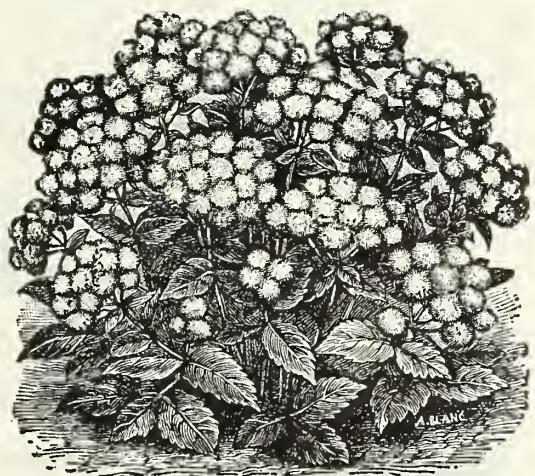
ABRONIA (Sand Verbena). 6 inch. Sweet scented, trailing plants, rosy-lilac flowers, borne in clusters. Suited for rockeries. Pkt. 5c.

ACROCLINUM. 2 foot. Daisy-like everlasting flowers; pink, white or mixed. Pkt. 5c.

AGERATUM. 5-inch. One of the best border flowers, blooming all summer; of easy culture. Grows 5 inches high. Blue or white. Pkt. 5c.



Antirrhinum



Ageratum

AGROSTEMMA (Rose of Heaven.) 1 foot. Attractive pink blossoms on long, slender stems. Very pretty in masses. Pkt. 5c.

ALYSSUM. 5 to 10 inches. Profuse bloomer, good for bordering or for bouquets; fine for window boxes. Sow very early.

Sweet, Fragrant white flowers. The old favorite. Pkt. 5c.

Little Gem. Dwarf and compact. Good for border. Pkt. 5c.

Carpet of Snow. Very dwarf trailing plant. Pkt. 5c.

AMARANTHUS (Tricolor Splendens—Joseph's Coat.) 2½ feet. The inner foliage is of blackest bronze, tipped with green, while the outer foliage is bright scarlet and gold. The colors are especially brilliant if grown in poor soil. Pkt. 5c.

ANTIRRHINUM (Snapdragon). Dark glossy leaves and beautiful spikes of flowers, with finely marked throats; one of the most showy border plants. Of easiest culture.

Queen of the North. Large, fragrant, white flowers. Nice for pot-culture as well as borders. Pkt. 5c.

Tall Sorts. 18-inch. Mixed. All shades of red and yellow; best for cutting. Pkt. 5c.

Dwarf Sorts. 8 inch. Mixed. Large variety of colors; best for edging. Pkt. 5c.

ASTERS. One of the most popular flowers for late summer and fall display. Sow seed early in deep soil with plenty of mulch.

Hohenzollern. Improved. The flowers are very large and double with curled petals on long stems very graceful; mid season to late blooming. White, blue, pink, lavender, purple or mixed. Pkt.....10c

Giant Comet. A beautiful, distinct variety, resembling chrysanthemums, white and mixed colors. Pkt.....10c

Queen of the Market. The best early aster flowering two weeks earlier than the other varieties. White, pink, scarlet, blue and mixed. Pkt.....5c

Branching. Large, late-blooming, with long, strong stems. Mixed colors. Pkt. 5c

Betteridge Quilled. Flowers large, freely produced, and of brilliant colors; height 12 inches. Mixed colors. Pkt.....5c

Truffaut's Peony Perfection. Large and perfectly double, with beautiful curved petals, giving flowers a globular form. Mixed colors. Pkt.....5c

Chrysanthemum Dwarf. Early flowering; 9 inches high. Good sized flowers, free bloomer. Mixed colors. Pkt.....5c

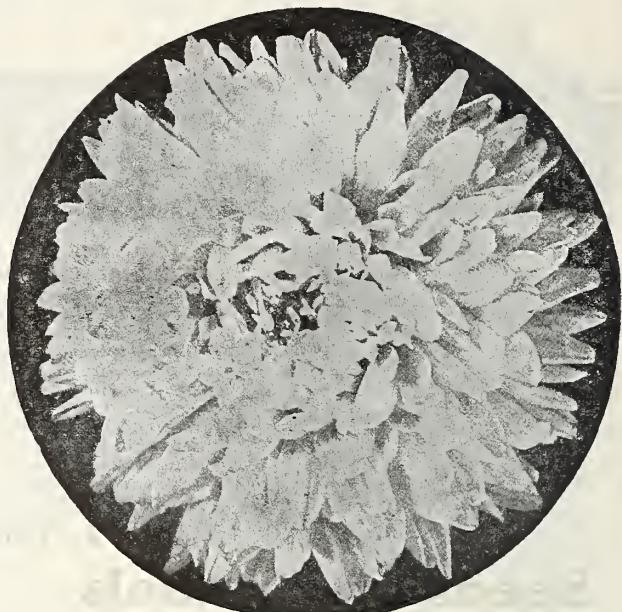
Started Plants. Mixed colors. Per dozen, 50c; postpaid.

BALSAM. Sometimes called "Touch-Me-Not" or "Lady's Slipper." A tender annual growing about eighteen inches tall in the shape of a small tree and producing all along the branches showy single and double flowers like small roses. Should be grown in rich soil. T.A.

Camellia-Flowered. The best of all Balsams. Flowers very large, perfect in form, double and produced in abundance. Mixed colors. Pkt. 5c.



Calendula



Aster

BACHELOR'S BUTTON (See *Centaurea Cyanus*, page 59 and *Globe Amaranth*, page 60.) Pkt. 5c.

BUTTERFLY FLOWER (See *Schizanthus*, page 63.)

CASTOR BEAN (See *Ricinus*, page 63.)

CANDYTUFT. A free-flowering, hardy annual some what resembling Alyssum, but larger, with longer heads of bloom, fragrant and easily grown early in the season. Sow early where plants are to bloom.

Empress. A complete mass of pure white flowers. Valuable for bouquets. Pkt.....5c

Fine Mixed. Red, pink and white. Pkt.5c

CALENDULA. The old "Pot Marigold." A very hardy annual with double yellow flowers, like double daisies. Blooms all summer and grows about 15 inches tall. Pkt.....5c

CALLIOPSIS. Very hardy and showy annual with bright yellow and reddish brown single daisy-like flowers, easily grown and useful both for garden decoration and cutting. Sow early and thin to 6 inches apart. Mixed. Pkt. 5c.

**For Fertilizer in the Flower Beds
Use "Red Snapper"**



Calliopsis

We frequently hear of Aster growers having trouble with the root aphid or green louse on the roots. This can be controlled and held in check by the free use of tobacco dust. Remove a little of the soil at the side of the plant and apply the dust, or make a strong "tea" by steeping tobacco stems, and water the plant with it. Better results can be obtained with Asters by planting them on a new plot of ground each year.

CANNA (Indian Shot). Stately plants with handsome foliage and showy flowers. The seeds should be soaked 24 hours in warm water before planting. If sown in February, should bloom in July.

Crozy's Dwarf Hydrid. Saved from best and largest flowers only. All colors. Pkt.....5c

CELOSIA CRISTATA (Cockscomb). Plumosa. About 2 feet high, of branching habit, with feathery plumes of brilliant red; one of the most effective ornamental plants.

Tall Varieties. Mixed. Pkt.....5c

Dwarf Varieties. Mixed. Pkt.....5c

CENTAUREA. There are two types of this plant one the "Gymnocarpa" or "Dusty Miller" a plant with silvery grey foliage and largely used for bordering formal beds and the other, our old-fashioned Bachelor Button or Corn Flower Centaurea Cyanaea, which is a very hardy annual flowering all summer and useful for cutting. Very easily grown.

Cyanus. (Bachelor's Button.) Also called Blue Bottle, Ragged Sailor and Corn Flower. Is a hardy annual, coming up year after year from self-sown seed. Mixed. Pkt.....5c

Emperor. Intense blue. Bachelor Button. Pkt.....5c

Gymnocarpa. (Dusty Miller.) Graceful, fine-cut, silvery white foliage. Nice for edging beds. Pkt.....5c

Imperialis. (Giant Sweet Sultan.) Double sweet-scented flowers borne on long, stout stems. Keeps for a week in water, if cut when about to open; 2 feet high; mixed. Pkt.....5c

CHRYSANTHEMUM. (Annual). Showy and effective garden favorites, extensively grown for cut flowers. The hardy annuals are summer flowering border plants, good for pot cul-



Canna

ture and quite distinct from the autumn flowering varieties. Choice mixed. Pkt.....5c

CLARKIA. Very pretty free flowering annuals desirable for shady places. The flowers of rose, white, red, purple, etc., borne in profusion during the summer; 1 to 2 feet. Mixed. Pkt.....5c

CLEOME. Pungens. (Giant Spider Plant). Rose colored flowers with long stamens. A tall grower, and blooms freely until frost. Pkt.....5c

COLEUS. The most popular of all foliage plants. Easily grown from seed, but must be started in a box in the house or hot-bed as the seed is very fine and when sown is scarcely covered, but must be kept moist. Tender annual. Pkt.....5c

COSMOS. Autumn blooming plants of exceedingly graceful habit. The single star-like flowers are borne profusely in loose clusters, ranging in color from white through pink to crimson. The feathery spring green foliage well adapts it as a background for dwarfed flowers. If topped when half grown the plants bloom much earlier, the check inducing immediately flowering. Seeds should be sown early in the spring and the plants transplanted two feet apart when danger from frost is past. Grows 5 to 7 feet high.

Lady Lenox. Strong, vigorous grower, bearing shell-pink flowers of extraordinary size and substance. Excellent for cutting. Pkt.....5c

Mammoth Giant Perfection. White, pink, red or mixed. Pkt.....5c



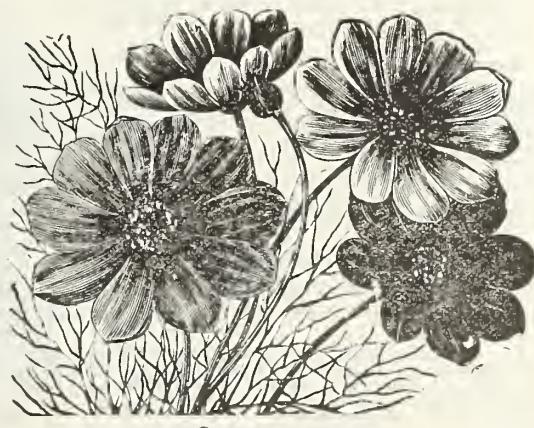
Centaurea Imperialis

Early Flowering. Comparatively dwarf plants producing both white and colored flowers, coming into bloom much earlier than the giant forms and will give a great profusion of bloom until late in the autumn. Mixed. Pkt.....5c

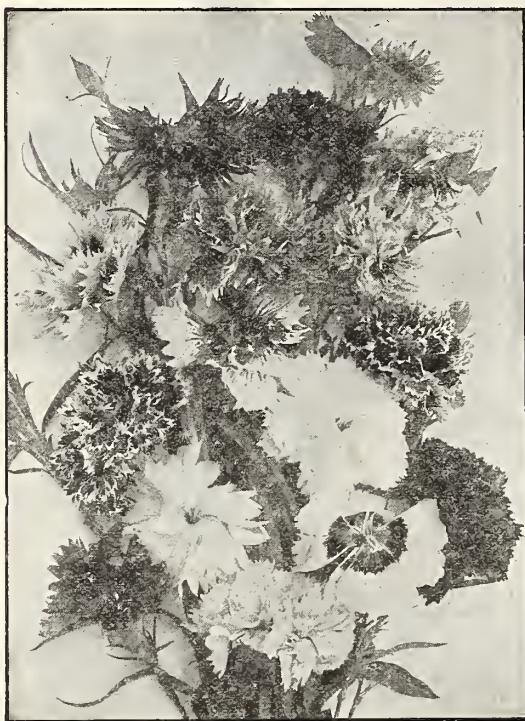
CYCLAMEN Giganteum. They make flowering bulbs in one season if sown in sandy soil. Beautifully mottled leaves, immense flowers of great substance. Mixed colors. Pkt.....15c

DATURA (Sweet Nightingale). A large, strong plant, with trumpet-shaped, fragrant, pearl-white flowers; 3 feet. Pkt.....5c

DELphinium (Larkspur). Giant Hyacinth-Flowered Mixed, 3 feet. Derives its name from the striking resemblance of the flowers to a double Hyacinth. The colors are both brilliant and delicate. Pkt. 5c.



Cosmos

**Dianthus**

flower, bearing hundreds of flowers during the season, of white, yellow, crimson and violet. Some varieties combine two or more of these colors in spots, flakes and splashes in such a manner as to give the flowers a most bizarre effect. Mixed. Pkt.....5c

GAILLARDIA. (Blanket Flower.) *Picta Lorenziana.* The heads of star-shaped tufted flowers are greatly admired for their rich blending of red, yellow and orange. 1½ feet. Pkt.....5c

GERANIUM. Favorite house plant. Seed started early will bloom the first year. Mixed colors. Pkt.....5c

GLOBE AMARANTH. (*Gomphrena*.) Sometimes called Bachelor's Button. A very pretty everlasting flower with blossoms resembling clover. 2 feet. Red, white and mixed. Pkt.....5c

GODETIA. Beautiful garden plants, having delicately shaded, large, satiny texture, trumpet-shaped blossoms. Easily cultivated in any good garden soil. 1½ feet. Pkt.....5c

GOLDEN FEATHER. See Pyrethrum. Page 63.

GYPSOPHILA (*Paniculata*). 2 feet. White flowers on branching stems, producing a veil-like mist over the plant. Pkt.....5c

Elegans Rosca. Soft pink in color. Pkt.....5c

HELIANTHUS (Sunflower). Remarkable for the stately growth, size and brilliancy of their flowers, making a very good effect among shrubbery and for screens.

Californicus Fl. Pl. 5 ft. Double dark yellow. Pkt.....5c

Russian Mammoth. Single, or gigantic dimensions. For larger amounts see Bird seed. Pkt.....5c

HELIOTROPE. In shades of purple, fine for bouquets; the sweet vanilla odor is liked by all. Pkt.....5c

ICE PLANT. (*Mesembryanthemum*.) Page 61.

DIANTHUS. Carnation-like flowers. Of value for bedding. The colors range from pure white to crimson spotted and striped. Perennial, but bloom the first summer, and for years, if the flowers are freely picked.

Chinensis (Double Chinese or Indian Pinks). Compact plants with large double flowers. Excellent for bouquets as well as bedding. Pkt.....5c

Hedgewigi. Double Japan Pinks.) Much larger than the Chinese Pinks.

Hedgewigi Fireball. Brilliant scarlet. Pkt.....5c

Hedgewigi Snowball. Pure white. Pkt.....5c

Hedgewigi Midnight. Blood red. Pkt.....5c

Hedgewigi Mixed. All colors. Pkt.....5c

DIMORPHOTHECA AURANTIACA. (African Daisy).

An extremely showy annual daisy from South Africa which suits our climate conditions perfectly. The bush plant grows 12 to 15 inches high. The flowers which are 2½ inches across, are a rich glossy orange yellow with dark disk and halo. These glitter in the sunshine and produce a magnificent sight when in full bloom. Seed may be sown in the same way as Aster or Petunias and should have a dry sunny position. They bloom the greater part of the summer and fall. Pkt. 10c.

ESCHSCHOLTZIA. (California Poppy.) A hardy free-flowering annual growing about fifteen inches high and producing quantities of single, poppy-shaped blooms in shades of yellow, orange and red. Flowers over a long period. Sow early where it is to remain, as it will not bear transplanting.

California, all shades of yellow. Pkt.....5c

EVERLASTING. (See *Acroclinium Celosia*, *Globe Amaranth*, *Gypsophila*.) Pick when flowers open and hang stems up, to dry for winter bouquets. Pkt. 5c

FEVERFEW—See Matricaria. Page 61.

FOUR O'CLOCKS. (Marvel

of Peru.) This is another good old-fashioned

IMPATIENS SULTANI. Rosy carmine flowers 1 inch in diameter, produced freely throughout the season. Although a house plant, it does finely out of doors. 1½ ft. Pkt.....5c

KOCHIA (Burning Bush or Summer Cypress.) The plants grow with many slender branches resembling a small, closely sheared evergreen with light green leaves until fall, when the whole plant turns crimson. Seed germinates readily. Sow May 1, and thin to 2 feet apart. 2½ feet high. Pkt....5c

LANTANA. Shrubby plants with Verbena-like flowers, in shades of white, red and yellow. Pkt.....5c

LARKSPUR. (See Delphinium.) Page 59.

LINARIA (Kenilworth Ivy). Flowers lavender and purple. A charming, small, hardy, perennial trailing plant, suitable for baskets, vases, pots and rock work. Pkt.....5c

LOBELIA. Annual plants of dwarf compact growth, four to six inches in height covered with numerous small star-like flowers. Very pretty when grown as an edging for flower-beds, also for hanging-baskets and vases, and as house plants in pots in the winter.

Crystal Palace (Compacta). 6 in. Deepest blue, dark foliage. Pkt.....5c

Trailing Lobelia. A dwarf plant of trailing habit; splendid for porch boxes, hanging baskets and vases. Deep blue flowers and dark foliage. Pkt.....5c

MARIGOLD. The Marigolds are old favorites, free-flowering annuals of easy culture. They light the garden with a glitter of yellow far into the frosts of autumn. The tall varieties have uniformly large yellow or orange colored flowers, and are well adapted for large beds or mixed borders. The dwarf varieties make a fine border for the taller sorts, and both are effective when planted in groups or in the garden borders.

African. Immense flowers, double, all shades of yellow. Pkt.....5c

French. Dwarf grower; double flowers, rich golden yellow marked with velvety brown. Pkt.....5c

MATRICARIA (Feverfew). Alba Plenissima. 3 ft. Neat, small, double white flowers, well adapted for bedding and cutting. They are perennials in mild climates, but in our latitude are treated best as biennials or annuals.

MESEMBRYANTHEMUM. (Ice Plant.) Suitable for rock work, hanging baskets, etc. Foliage thick, frosted, wax-like white flowers. Pkt.....5c

MIGNONETTE. A universal favorite on account of its sweet and delicate fragrance. The massive spikes are closely set with large, highly colored and very fragrant florets. Pkt.....5c

MIMOSA. (Sensitive Plant.) A curious and pretty plant; with pinkish white flowers; the leaves close and droop at the slightest touch at night. Pkt.....5c

NASTURTIUM. (Dwarf, or Tom Thumb.) A bed of Dwarf Nasturtiums in the yard is very brilliant and attractive, blooming all the season. One foot high.

Beauty. Scarlet splashed canary. Pkt.....5c

Chameleon. Mottled crimson, bronze and yellow. Pkt.....5c

Crystal Palace Gem. Sulphur with maroon spots. Pkt.....5c

Golden King. Deep yellow flowers. Pkt.....5c

Golden Queen. Leaves golden-green, flowers orange yellow Pkt.....5c

King of Tom Thumbs. Deep scarlet. Pkt.....5c

Scarlet Queen. Leaves golden-green flowers orange yellow. Pkt.....5c

OUR SPECIAL DWARF NASTURTIUM MIXTURE

Will give a larger variety of colors in even proportion than any other Nasturtium mixture, for it is put up by ourselves from named sorts, and also contains a large share of the Liliput Nasturtium and of the Dwarf Chameleon, which have the richest and most varied combination of colors ever produced, showing odd colors hitherto unknown. Pkt. 5c; oz. 15c; 1 lb. 45c; lb. \$1.50; postpaid.

TALL NASTURTIUMS see page 66.

NICOTIANA AFFINIS (Tuberose-flowered Tobacco). Delicately fragrant, large white star-shaped flowers; open at evenings and early morning; easily grown, blooms freely in the house. 2 to 3 ft. Pkt.....5c

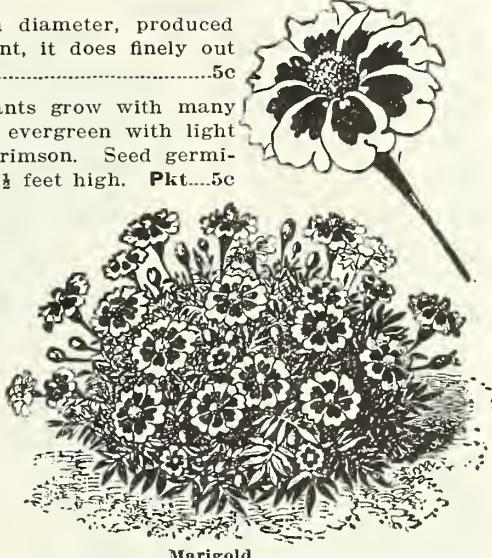
Sanderae. Sweet scented, brilliant red flowers on sturdy, bushy plants 2 feet high; grows readily from seed. Pkt

.....5c

NIGELIA. (Love in a Mist or Devil in a Bush.) Miss Jakyll. The plants are vigorous and give an abundance of double oddly shaped, fluffy flowers of the clearest blue, contrasting most charmingly with the fine fern-like foliage. Pkt.....5c



Nasturtium



Marigold

PANSIES

One of the most interesting classes of flowers grown. A bed of pansies in bloom always has something new for you in variety of color and marking, every time you visit it, although they are in bloom continuously from early spring until late in fall.

The seed may be sown in the hot bed or open ground. Keep the soil moist. They prefer a shady place. Do not let the plants seed if you wish to keep them in bloom. If sown in the fall, pansies will bloom very early in the spring.

Started Plants. Mixed colors in bud and bloom. Per doz., 50c; postpaid.

Masterpiecee. (**Giant Curled.**) The fluted petals make the enormous flowers appear double. The colors and combinations are odd and striking. Pkt. 20c.

Mammoth Butterfly. The flowers are very large, of good form and substance and produce freely. In colorings they are varied, seldom two alike in a hundred plants. They are mottled and spotted, streaked, tigereed and splashed, while the colors are mainly those rich wine reds, chocolates, velvety red-brown, lavender, violet and purple shades which are only found in a pansy blossom, making a very beautiful display. Pkt. 15c.

Giant Adonis. Light blue. Pkt. 10c.

Giant Atropurpurea. Dark Purple. Pkt. 10c.

Giant Bronze. Shade of bronze. Pkt. 10c.

Giant Cardinal. Brilliant red. Pkt. 10c.

Giant Goldelse. Yellow. Pkt. 10c.

Giant King of Blacks. Beautiful black. Pkt. 10c.

Giant Emperor William. Brilliant ultramarine blue with a purple violet eye. Pkt. 10c.

Fancy Striped. A beautiful variety from Belgium, with good sized flowers, striped and mottled in various tints of contrasting ground colors. Pkt. 10c.

Giant Snow Queen. Flowers of a delicate, pure satiny white, handsome and attractive. It shows finely in beds or for cut flower work, and beautifully for cemetery use. Pkt. 10c.

Bugnot. Shades of red and bronze. Brightest cardinal and reddish brown. Pkt. 10c.

Odier. Flowers of immense size, and are of the popular Odier type, being all three or five spotted on background of very rich colors. The flowers are of good substance and fine form, of most compact growth. Pkt. 5c.

Finest Mixed. A mixture of the best sorts and colors. Pkt. 10.

Superb Mixture. A very good quality. Pkt., 5c.

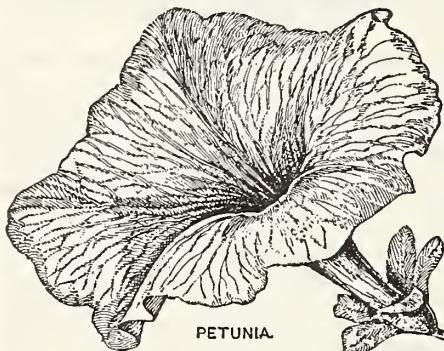
Special Giant Mixture. An excellent combination of fancy strains, selected with a view to being as near perfection as possible. Pkt., 10c.

PANSY SPECIAL NO. 14

1 Pkt., each of eight Giant named colors 60c

PANSY SPECIAL NO. 19

1 Pkt. each Bugnot, Mammoth Butterfly
and Odier 25c



PETUNIA.

PETUNIA

Petunias are very popular for their rich coloring, continuation of bloom, pleasant fragrance, and easy culture. Can be sown in the open border, in full sun or partial shade. Transplant easily. 1½ feet high.

General Dodds. Beautiful; velvety, dark red. Pkt. 5c

Howards Star. Rich, velvety, maroon with a white blotch on each petal. Pkt. 5c

Snowball. Pure snowy white. Pkt. 5c

Giant Ruffled and Fringed Single. The flowers are exquisitely ruffled or frilled, of immense size, and of great variety of colors. Pkt. 10c.

Double Mixed. Sure to produce a good percentage of double flowering plants. Pkt. 20c

Single Mixed. Extra choice. Pkt. 5c

PORTULACA (Rose Moss). Forms masses of delicate green foliage covered with bright colored flowers somewhat resembling small roses. They thrive best in a rather rich, sandy soil and a sunny situation, will stand any amount of dry weather.

Single Mixed. All colors. Pkt. 5c

Double Mixed. Not all the plants will come double, but the single ones can be pulled out. Pkt. 10c

PRIMULA (Chinese Primrose). This is one of the most charming winter flowering house plants. Leaves are rich green and prettily cut, the star shaped flowers stand well above the foliage in umbels and have a delicate odor peculiarly their own. Pkt. 15c



Pansy



Double Portulaca

**PHLOX Drummondii**

Sown in the open ground during April and May, they produce a perfect blaze of brilliant colored flowers until cut down by frost. The richness of color and the profusion with which the flowers are produced make them indispensable for massing in beds and borders. Thrives in almost any situation. For masses of colors or for bouquets they are unsurpassed. One foot high.

Scarlet. Very showy. Pkt.....5c

Alba. Pure white. Pkt.....5c

Rosy Chamois. Beautiful shade of rose. Pkt.....5c

Extra Choice Mixed. Best large flowered. Pkt.....5c

Starred and Fringed. Very dwarf flowers fringed and distinctly edged with white. Mixed Pkt.5c

POPPIES

Poppies are noted for their satiny flowers of silk-like texture, in many brilliant color combinations. The foliage is delicate and the blossoms are airily poised on slender stems. Sow the seed where the plants are to grow, as they do not bear transplanting.

Tulip. Cup-shaped, brightest scarlet with black spots at base of each petal. Single. Pkt.....5c

Peony-Flowered Mixed. Splendid large double flowers of all colors. Pkt.....5c

Shirley. Pink, carmine and brilliant crimson; many edged with white; single and half double, splendid. Pkt.....5c

White Swan. Immense double fringed flowers of purest white. Pkt.....5c

Carnation Flowered. Brilliant, finely fringed double flowers of various colors. Pkt.....5c

PYRETHRUM (Golden Feather) Parthenifolium Aureum. 6 in. One of the best plants for edging, grown for its beautiful yellow foliage. More successfully treated as an annual.

RICINUS (Caster Bean) Zanzibariensis Mixed. 10 to 12 ft. The ornamental leaves, beautifully lobed, are $2\frac{1}{2}$ to 4 ft. across. Each plant makes a perfect pyramid of foliage thickly set from top to bottom. The difference between the varieties is in the coloring of the grand bamboo-like stems and the long slender leaf stalks. Pkt.....5c

SALPIGLOSSIS (Velvet Flower). Undoubtedly one of the most attractive annuals and should be in every garden. The blossoms are tube shaped much like a Petunia but rivaling the latter in the beautiful colors displayed. Each flower is veined

with a glint of gold, and it is the only flower to our knowledge possessing this odd characteristic. Grows easily from seed. Plant in warm, rich soil. $1\frac{1}{2}$ feet tall. **Mixed Pkt.**5c

FLOWER SEED COLLECTION

See Page 38

SALVIA (Flowering Sage). Among the most brilliantly colored of garden flowers and extremely useful for bedding; also valuable for pot culture. Blooms are borne in long spikes of fiery red and continue to bloom until severe frosts. Start in house and transplant into light soil. Tender perennials, 2 to 3 feet tall. **Pkt.**5c

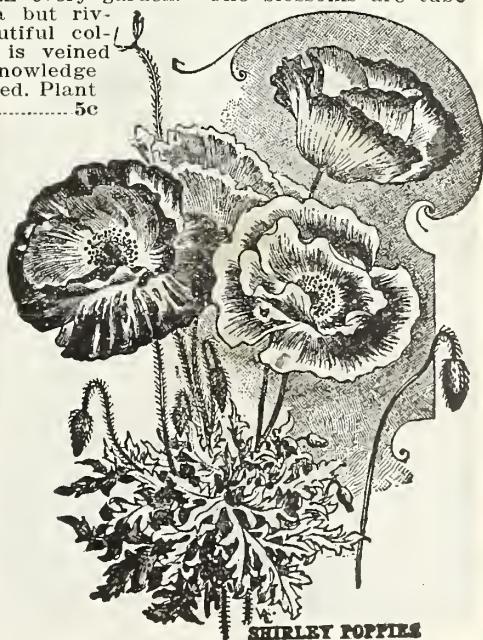
Started Plants, 50c dozen; postpaid.

SENSITIVE PLANT. (See Mimosa, page 61.)

SMILAX. One of the most desirable window vines, on account of its charming, glossy green, elegant, and graceful foliage. Sow seed in February and keep in moist place. **Pkt.**5c

SNAPDRAGON. (See Antirrhinum, page 57.)

SCHIZANTHUS (Butterfly Flower.) "The Poor Man's Orchid," near, pyramidal bushes covered with a multitude of small butterfly-like flowers of the most brilliant and striking color designs. 1 ft. **Pkt.**5c



SHIRLEY POPPIES



Stocks

VERBENA. Free-flowering hardy annuals of low-spreading growth; flowers of the most brilliant colors. Sow them early and they will bloom profusely from June until winter.

Defiance. Best scarlet. Pkt.....	5c
Alba. Delicate white. Pkt.....	5c
Mayflower. Delicate pink, very fragrant. Pkt.....	5c
Hybrida Bluc. Blue shades. Pkt.....	5c
Purple. Purple shades. Pkt.....	5c
Choice Mixed. All colors. Pkt.....	5c
Started Plants. Mixed colors. Per dozen, 50c; postpaid.	

VINCA (Periwinkle). Splendid house and bedding plant, with glossy leaves and circular flower; mixed. Pkt...5c



Salpiglossis

SCABIOSA. (Mourning Bride.) Commonly known as the Pincushion Plant owing to the queer effect of the center of the flower. The outer petals making a ruffle around the cushion filled with pins, carried out the idea. The flower stems are long and the blossoms keep well in water. The soft shades predominate. 2½ ft.

Tall German Double. Mixed, all colors. Pkt.....5c

Black Prince. Very double, rich dark maroon. Pkt.....5c

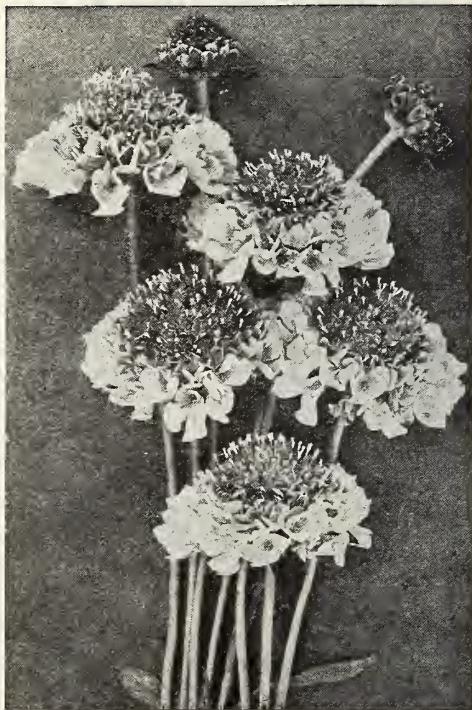
Snowball. Elegant, white flowers, sure to be liked for cases and bouquets. Pkt.....5c

STOCK Giant Perfection. Very desirable because of its brilliancy of color, profusion and duration of bloom. Fragrant with large double rosettelike flowers. Mixed Pkt.5c

Princess Alice. Snow white. Of branching habit. Very profuse bloomer especially if kept cut. Pkt.....5c

SUNFLOWER. (See Helianthus, page 60.)

WALLFLOWER. Single annual. Very fragrant; purple orange and bronze. A favorite English flower. Seed sown the first of May will bloom from July until severe frosts. It is very satisfactory as a pot plant for winter, if kept in a cool room. Pkt.....5c



Scabiosa

ZINNIA. Flowers all summer, making the most brilliant growth with abundant dark-green foliage, each plant terminating in a bold showy flower. Excellent for border or summer hedge. Seeds grow easily and young plants transplant safely.

Giant Flowering. Plants of vigorous growth, about 3 feet high, bearing profusely their perfectly formed double flowers. Mixed. Pkt.....5c

Dwarf Fireball. Glowing, brilliant scarlet. Pkt.....5c

Zebra. Flowers striped with red and yellow. Pkt.....5c

White Gem. Small, double white flowers. Pkt.....5c

There are many bargains and low prices in this catalog, it will pay you to read it carefully.

SEEDS OF ANNUAL CLIMBERS

Use Inoculating Bacteria on Sweet Peas

Sweet Peas

Sweet Peas are among the most beautiful of all our hardy annuals. Select a sunny open place, several feet from any building or close fence, and as far as possible from large trees. Sow as early in the spring as the ground can be worked. Make a trench six or eight inches deep, but cover the seed only about an inch at first. As they come up, rake the dirt around the little plants, so that by the time they have reached the top of the ground, the trench will be almost full. Furnish support early. Give them plenty of water, and keep the blossoms picked closely. If they produce seed pods, they will stop blooming.

LARGE FLOWERING AND UNWIN TYPES

Aurora. A beautiful orange rose. Pkt. 5c; oz. 10c; 1 lb. 25c.

BLACK KNIGHT. Deep maroon, veined black; large and open. Pkt. 5c; oz. 10c; 1 lb. 25c.

BLANCHE BURPEE. Large pure white. Pkt. 5c; oz. 10c; 1 lb. 25c.

BOLTON'S PINK. The extra large expanded flowers are of a soft salmon-orange pink, very showy. Pkt. 5c; oz. 10c; 1 lb. 25c.

COUNTESS RADNOR. A new lavender, very fine. Pkt. 5c; oz. 10c; 1 lb. 40c.

DOROTHY ECKFORD. Pure white flower, beautifully shell-shaped; extra large, three on a stem. Pkt. 5c; oz. 10c; 1 lb. 25c.

DUKE OF WESTMINSTER. Very rich purple tinted with violet. Pkt. 5c; oz. 10c; 1 lb. 25c.

EMILY HENDERSON. Very large, beautiful white. Blooms early. Pkt. 5c; oz. 10c; 1 lb. 25c.

EVELYN BYATT. Standard rich orange salmon, wings a somewhat deeper shade. Very striking. Pkt. 5c; oz. 15c; 1 lb. 40c.

EXTRA EARLY BLANCHE FERRY. Standard rose-pink wings, creamy white. Very early. Pkt. 5c; oz. 10c; 1 lb. 30c.

FLORA NORTON. A rich lavender, entirely free from any pinkish tinge—almost a bright blue. Pkt. 5c; oz. 15c; 1 lb. 40c.

FRANK DOLBY. Pale blue, very large and fine. Pkg. 5c; oz. 10c; 1 lb. 40c.

GLADYS UNWIN. A pale rose pink, with large bold flowers on long stems. Very early. Pkt. 5c; oz. 10c; 1 lb. 25c.

HORACE WRIGHT. Large purple flowers on long stems. Pkt. 5c; oz. 10c; 1 lb. 25c.

JANET SCOTT. A grand, deep, rich pink. Pkt. 5c; oz. 10c; 1 lb. 25c.

LADY GRISEL HAMILTON. A very light, dainty lavender. Pkt. 5c; oz. 10c; 1 lb. 25c.

LOVELY. A soft shell pink. Very good. Pkt. 5c; oz. 10c; 1 lb. 25c.

MRS. DUGDALE. Light carmine rose with faint markings of primrose. Pkt. 5c; oz. 10c; 1 lb. 25c.

MISS WILMOTT. One of the richest orange-pink sweet peas. Pkt. 5c; oz. 10c; 1 lb. 25c.

MRS. GEO. HIGGINSON, JR. Azure blue. Pkt. 5c; oz. 10c; 1 lb. 30c.

NAVY BLUE. Dark indigo blue. Large and well formed. Pkt. 5c; oz. 10c; 1 lb. 25c.

NORA UNWIN. Nicely waved or fluted; usually has three flowers on a stem. One of the best white sweet peas yet introduced. Pkt. 5c; oz. 15c; 1 lb. 50c.

PRIMA DONA. Exquisite rose pink; large and profuse. Pkt. 5c; oz. 10c; 1 lb. 25c.

PRINCE OF WALES. Rosey crimson. Pkt. 5c; oz. 10c; 1 lb. 25c.

PHYLLIS UNWIN. Very large size. Rosy carmine. Pkt. 5c; oz. 10c; 1 lb. 25c.

QUEEN ALEXANDER. Scarlet. Pkt. 5c; oz. 10c; 1 lb. 25c.

SALOPIAN. Rich red scarlet; large and fine. Pkt. 5c; oz. 10c; 1 lb. 25c.

SHASTA. Vines vigorous. Standard and wings both waved. Creamy white when first open, changing to ivory white. Pkt. 5c; oz. 10c; 1 lb. 25c.

SYBIL ECKFORD. Wings delicate lemon; standard blush pink or creamy buff. Pkt. 5c; oz. 10c; 1 lb. 25c.

SUNBEAM. Delicate cream. Pkt. 5c; oz. 10c; 1 lb. 25c.

SPENCER OR BUTTERFLY VARIETIES

APPLE BLOSSOM. Heavily shaded and edged with deep pink, rose and white. Pkt. 10c; oz. 25c; 1 lb. 75c.

BLANCHE FERRY. Carmine rose, pinkish white wings. Pkt. 10c; oz. 25c; 1 lb. 75c.

BURPEE'S WHITE SPENCER. Extra long stems bearing three or four pure white blossoms. Standard fluted. Pkt. 10c; oz. 25c; 1 lb. 75c.

COUNTESS SPENCER. Enormous flowers delicate pink shading deeper at the edges. Pkt. 10c; oz. 25c; 1 lb. 75c.

HELEN LEWIS SPENCER. Orange-rose wings with crimson-orange standard. Pkt. 10c; oz. 25c; 1 lb. 75c.

JESSIE CULBERTSON SPENCER. Dark rose striped on white. Pkt. 15c; oz. 75c; 1 lb. \$2.25.

KING EDWARD VII. Grand large flowers of a rich crimson scarlet. Pkt. 10c; oz. 25c; 1 lb. 75c.

MRS. ROUTZAHN. Apricot pink and straw color. Pkt. 10c; oz. 25c; 1 lb. 75c.

OTHELLO. Chocolate-red, self-colored. Pkt. 10c; oz. 20c; 1 lb. 75c.

PRIMROSE SPENCER. Pure primrose. Pkt. 10c; oz. 25c; 1 lb. 75c.

ROBERT SYDENHAM. Orange. Pkt. 25c; oz. \$1.25.

VERMILLION. Brilliant, bright scarlet. Pkt. 15c; oz. 50c; 1 lb. \$1.75.

WEDGEWOOD. Large silvery blue. Pkt. 15c; oz. 50c; 1 lb. \$1.75.

SWEET PEAS IN MIXTURES

CHOICE MIXTURE OF SPENCER VARIETIES. Pkt. 5c; oz. 15c; 1 lb. 40c; lb. \$1.50.

LIGHT SHADES. Light to deep pink. Pkt. 5c; oz. 10c; 1 lb. 35c; lb. \$1.00.

DARK SHADES. Brightest rose to dark scarlet. Pkt. 5c; oz. 10c; 1 lb. 35c; lb. \$1.00.

SPECIAL MIXED. A well proportioned mixture of the above named varieties. Pkt. 5c; oz. 10c; 1 lb. 35c; lb. \$1.00.

CHOICE MIXED. A good mixture of many old and new varieties. Pkt. 5c; oz. 10c; 1 lb. 25c; lb. 85c.

Annual Climbers

ARISTOLOCHIA. (Dutelmann's Pipe.) An ornamental climber with brownish flowers resembling a miniature pipe. A perfectly hardy perennial standing any climate where the oak lives. Pkt.....	5c
BALLOON VINE. (Love in a Puff.) A rapid grower with fine white flowers followed by inflated seed pods resembling small balloons. Height 10 feet. Pkt.....	5c
BALSAM APPLE AND PEAR. Very rapid and dense climbers, with golden-yellow fruit which opens when ripe, showing the seed and blood-red inside. Mixed. Pkt.....	5c
CANARY BIRD FLOWER. A rapid growing, delicate vine with clean, handsome foliage and an abundance of canary-yellow blossoms, somewhat resembling a bird with half extended wings. An excellent climber for shady places. Pkt.....	5c
CYPRESS VINE. A beautiful climber with a profusion of scarlet or white star-shaped blossoms and fern-like foliage adapted to ornamental work. Pkt.....	5c
DOLICHOS. (Hyacinth Bean.) Splendid climber, producing abundant clusters of pea-like purple and white flowers, followed by ornamental seed pods. 10 to 20 ft. Pkt.....	5c
MOON FLOWER. (<i>Ipomea Notitilla</i>) One of the most vigorous climbers. Will grow 30 feet; its large waxy white flowers open evenings and cloudy days. The hard outer coat of the seed should be cut through with a knife and planted in warm, rich ground. Keep the soil moist. Pkt.....	5c
CARDINAL CLIMBER. We consider this a most beautiful brilliant and distinct annual climber and rapid grower attaining a height of 20 feet or more with beautiful deeply cut leaves not unlike some of the Japanese Maples and is literally covered with a haze of circular, fiery, cardinal red flowers from mid July to frost. The flowers are about half an inch in diameter and are borne in clusters of from 5 to 7 blooms each. Should be planted in warm, sunny situation on good soil. Pkt.....	10c
CLIMBING NASTURTIUM. Ideal ramblers that readily climb fences or wire netting. They are also very showy planted at the top of a steep slope or simply trailing on the level ground. They endure hot, dry weather very well and bloom continuously till frost. Foliage clean and refreshing. These blossoms are larger and the stems longer than the Dwarf Nasturtiums. Mixed. Per oz. 10c; pkt.....	5c
King Theodore. Rich, deep crimson; dark leaves. Pkt.....	5c
Edward Otto. Brownish lilac. Pkt.....	5c
Jupiter. Rich golden yellow. Pkt.....	5c
Mine. Gunther's Hybrids. Striped or blotched with shades of red, yellow and orange. Pkt.....	5c
Pearl. (Moonlight.) Whitish. Pkt.....	5c
Scarlet. Bright glowing red. Pkt.....	5c
Vesuvius. Bright salmon red. Pkt.....	5c
DWARF NASTURTIUM. See page 61.	



SPECIAL NO. 16

For those who desire vines to cover long stretches of fence, etc., we have a mixture of 12 or more varieties of annual climbers. Pkt. 5c; 15c per half oz; 25c per oz.



Cobeia

COBAEA. A beautiful rapid growing climber with large purplish, bell-shaped flowers; plant the seed edgewise, and cover lightly. Pkt.....

CONVOLVULUS or MORNING GLORY. The well-known kind. Mixed colors. Pkt.....

Japanese Giant. The mammoth flowers of this vine run from 4 to 6 inches across and are marked with most beautiful colors and shadings. The vines are strong and robust, growing from 30 to 50 feet high during the season. Pkt.....

GOURDS. Desirable for many places where an immense amount of vine is wanted quickly, producing odd and interesting fruit. Most sorts grow 20 to 30 feet in a season.

Dish Rag. Many ladies prefer a dish cloth made of sponge-like lining of this gourd to anything else, as it always sweet and clean as long as any part of it is left. Pkt.....

Sugar Trough. This gourd grows large holding from 3 to 5 gallons. Very hard shell. Pkt.....

Nest Egg. Resembling the eggs of hens; are uninjured by the cold or wet, therefore make the best nest eggs. Pkt.....

Pear Shaped. Striped yellow and green. Pkt.....

Mixed Gourds. All of the above. Pkt.....

HUMULUS. (Japanese Hop.) A rapid growing climber of easy culture, leaves variegated. Sows itself after first year. Pkt.....

PASSION FLOWER. One of the best summer vines for general growing. The beautiful blue flowers somewhat resemble a water lily in shape. Pkt.....

WILD CUCUMBER. A very rapid climber, often growing 30 feet in one season. It is covered with clusters of white sweet-scented flowers, followed by ornamental prickly seed pods. It is fine to cover a trellis, old tree or unsightly building, and will sow itself after the first year. Oneoz, 15c; Pkt.....

SEE OUR BEST ROSE COLLECTION, PAGE 75

Nursery Department

ORNAMENTAL SHADE TREES

We offer one of the finest assortments of shade trees in the west. Our trees and shrubs are carefully packed and wrapped in burlap, sent by express at your expense unless otherwise ordered.
T denotes trees that attain a height of 40 ft. and over; M, 25 to 40 ft.; S, 8 to 15 ft.; D, 2 to 8 ft.

ACER—MAPLE

A. Dasycarpum or Eriocarpum. (Silver-leaved.) T.—A hardy rapid growing native tree of large size, valuable for street planting. Our stock of these is very large in all sizes. Price, 8 to 10 ft. 75c; 10 to 12 ft. \$1.00; specimens, \$2.00 each.

A. Dasycarpum var. Wierii Laciniatum. (Wier's Cut-leaved Silver Maple.) T. One of the best cut or dissected-leaved trees, being of rapid growth it soon produces an effect. Young shoots slender and drooping. Price 5 to 6 ft., 80c; 10 to 12 ft. \$1.50 each.

A. Negundo. (Ash Leaved Maple or Box Elder.) M.—A fine, rapid growing variety with handsome, light green foliage and spreading head; very hardy; desirable for street planting and succeeds in many sections where other varieties do not thrive. Price, 8 to 10 ft. 75c; 10 to 12 ft. \$1.00 each.

BETULA—Birch

B. Alba (European White Birch.) T. Of which Coleridge says: "Most beautiful of forest trees, the lady of the woods." Price, 6 to 8 ft. \$1.00; 8 to 10 ft. \$1.50 each.

Chinese Catalpa (C. Bungei.) A species from China. Foliage large and glossy; a shy bloomer. Top-grafted on tall stems it forms a perfect umbrella-shaped head and makes an effective tree for formal gardens. 1 year head \$1.50; 2 yr. head \$2.00.

ULMUS—Elm

U. Americana (American.) T. The noble, drooping, spreading tree of our woods. One of the grandest of park and street trees. Select specimens. Price 6 to 8 ft. 75c; 8 to 10 ft. \$1.00; 10 to 12 ft. \$1.50; specimens \$2.00.

SORBUS—Mountain Ash

S.—Aucuparia (Mountain Ash.) M. A small tree with shining, pinnated leaves and large cymes of white flowers, followed by clusters of bright red fruit. Price 6 to 8 ft. \$1.00; 8 to 10 ft. \$1.50 each.

TILIA—LINDEN

T. Americana (American.) T. A fine pyramidal tree, with large-sized leaves and fragrant flowers. Price 6 to 8 ft. 90c each.

T. Europaea (European.) M. A fine pyramidal tree, with medium-sized leaves and fragrant flowers. Price 6 to 8 ft. 90c each.

QUERCUS—Oak

Q. Palustris (Pin Oak.) M. Foliage deep green finely divided assumes a drooping form when it acquires age. One of the most valuable for street planting. Price \$1.50 each.

Q. Rubra (Red Oak.) T. An American species of large size and rapid growth, foliage purplish, red in the fall. Price \$1.50 each.

ROBINIA—Acacia or Locust

R. Pseud-Acacia (Black Locust.) M. A native tree, of large size and rapid growth; is being largely planted for timber; it is also quite ornamental. The flowers are in long racemes, white or yellowish, fragrant. Blooms in June. Price 6 to 8 ft. 75c.

POPULUS—Poplar

P. Nigra Fastigiata (Lombardy.) T. This grows to an immense height and is remarkable for its columnar growth. Price 8 to 10 ft. 75c; 10 to 12 ft. \$1.00 each.

P. Alba Bolleana (Silver.) M. New pyramidal form, leaves dark green on upper side, brilliant silver underneath. Very beautiful. Price 6 to 8 ft. \$1.00; 8 to 10 ft. \$1.50 each.

P. Deltoides (Monilifera) (Carolina.) M. A vigorous, healthy native tree of rapid growth, pyramid in form, with large, glossy leaves; valuable for park or street planting. Price 8 to 10 ft. 75c; 10 to 12 ft. \$1.00; specimens \$1.50 each.

Norway. Tree very hardy; is being planted extensively, resembles Carolina Poplar, but retains its size better as it mounts upward, making a sawlog quicker than any tree in cultivation; is also valuable for street and park planting as well as screens and shelters. 8 to 10 ft. 75c; 10 to 12 ft. \$1.00.

PRUNUS

P. Padus (European Bird Cherry.) M. A rapid-growing, beautiful tree, with glossy foliage and long bunches of white, fragrant flowers in May, succeeded by clusters of fruit like black currants. Price 6 to 8 ft. 75c; 8 to 10 ft. \$1.25 each.

Cherry, Wild Black. A beautiful upright, round headed, strong growing tree; slender, glossy leaves; hardy. 4 to 5 ft. 60c.

LIRIODENDRON—Tulip Tree

L. Tulipifera. T. One of the very largest native trees, with large, smooth, shining leaves, greenish-yellow flowers and an unbrageous head. Price 6 to 8 ft. \$1.00; 8 to 10 ft. \$1.50 each.

PLATANUS—Sycamore or Plane

P. Orientalis (European Plane.) T. A lofty, wide-spreading tree; large five-lobed leaves; valuable for its handsome foliage and free growth; makes an excellent street tree. Price 5 to 8 ft. 50c each.

Walnut (American Black.) The large, oily nuts are borne in heavy crops. They are much relished and always bring a fair price in market. Trees grow quite fast; wood is very valuable. Price 5 to 6 ft. 75c; 6 to 8 ft. \$1.00 each.

WEEPING TREES

MORUS—Mulberry

M. Var. Tartarea Pendula (Tea's Weeping Mulberry). S. A graceful and beautiful hardy tree, forming a perfect umbrella-shaped head, with long, slender, willowy branches, drooping to the ground and gracefully swaying in the wind. Price 1 yr. head \$1.50; 2 yr. head \$2.00 each.

ULMUS—Elm

U. Var. Camperdown Pendula (Camperdown Weeping Elm.) S. One of the finest weeping trees for the lawn. With broad foliage and branches drooping gracefully to the ground. Price 1 yr. head \$1.50; 2 yr. head \$2.00 each.

SALIX—Willow

S. Babylonica Var. Ramulis Auricis (Golden-Barked Babylonian Willow.) T. A novel and distinct variety of the well-known Babylonian Willow, with bright golden bark in winter. Price 6 to 8 ft. \$1.00; specimens \$1.50 each.

BETULA—Birch

B. Alba Var. Laciniata Pendula (Cut-Leaved Weeping.) T. Trunk straight, slender, white as snow; branches hanging in long, pendulous threads from a great height; leaves finely cut; a universal favorite. 6 to 8 ft. \$2.25 each.



Blue Spruce

Evergreens--Coniferae

Specimen Evergreen Trees

The following Evergreen Trees have all been transplanted two or three times, are handsome, selected trees, well branched and rooted, suitable for lawns, etc. Are dug with ball of dirt and burlapped.

Balsam Fir (A. Balsamea). A very erect, regular pyramidal tree with dull, dark green foliage; rapid growth and very hardy. 3 ft. \$3.50; 3 to 4 ft. \$4.50 each.

A. Douglassii (Douglas Spruce). Large conical form; branches spreading, horizontal; leaves light green above, glaucous below. Price 2 to 3 ft. \$3.00; 3 to 4 ft. \$4.00 each.

JUNIPERUS—Juniper

J. Hibernica (Irish Juniper). One of the most popular Junipers known. Rigidly upright and formal in character, resembling a green column. Price, 2 to 3 ft. \$1.50; 3 to 4 ft. \$2.25 each.

THUJA—Arborvitae

T. Occidentalis (American Arborvitae). A well-known native species of great value. It forms an upright conical tree of only medium size, and is especially valuable for screens and hedges. Price, 2 to 3 ft. \$1.25; 3 to 4 ft. \$2.25; 4 to 5 ft. \$3.00 each.

PICEA—Spruce

P. Canadensis (Black Hill Spruce). This is a truly remarkable tree, well suited to our varying climatic needs. Plant liberally of this splendid variety and you will never regret it. It grows to a large size, finally reaching a height of 75 to 100 ft. Moderately fast grower. Price, 18 to 24 in. 75c; 2 to 3 ft. \$2.25; 3 to 4 ft. \$4.50 each.

P. Excelsa (Norway Spruce). Rapid in growth, gracefully drooping in habit, dense in structure, regular in outline and perfectly hardy. Price, 2 to 3 ft. \$2.50; 3 to 4 ft. \$3.25 each.

P. Pungens Glauca Kosteriana (Koster's Blue Spruce). The richest colored of the tinted evergreens, hardy, vigorous grower, elegant habit. A beautiful tree for any lawn with its silvery blue sheen. We handle only the very best imported grafted trees of this variety. Price, 8 to 24 in. \$2.00; 2 to 3 ft. \$1.00; 3 to 4 ft. \$7.50 each.

P. Pungens Glauca (Colorado Blue Spruce). This is the selected blue form of the Picea Pungens. Only a small percentage of this variety produces the true blue foliage. Price, 2 to 3 ft. \$2.25; 3 to 4 ft. \$6.00 each.

Special Offers in Evergreen Trees

TRANSPLANTED EVERGREENS FOR WINDBREAK PLANTING

Protect your home and buildings with an Evergreen Windbreak. Plant three rows 10 feet apart and the trees 10 feet apart in the row. We offer four splendid varieties. Austrian Pine, Scotch Pine, Jack Pine, Norway Spruce, and Black Hill Spruce. The Pine varieties are especially adapted for the sandy soil of Kansas, Nebraska and neighboring states, while the Spruce does well in clay or loam. All three trees have been several times transplanted and have fine root systems. See illustration.

	Per 10	Per 100
Norway Spruce 12-18 inch transplants.....	\$2.50	\$20.00
Scotch Pine 12-18 inch transplants.....	2.50	20.00
Austrian Pine 12-18 inch transplants.....	3.00	25.00
Jack Pine 12-18 inch transplants.....	2.50	20.00
Black Hills Spruce 12-18 inch transplants.....	2.50	20.00

50 of same variety and size at 100 rate, 5 of same variety and size at 10 rate.

EVERGREEN TREES BY PARCEL POST

12 Different Kinds put up in packages of 50 Trees. Each Package \$1.00; any Six for \$5.00 Prepaid. Fine for Hedges, Windbreaks and Ornamental Lawn Planting. Safe arrival guaranteed to any point in the U. S. Complete planting instructions and cultural directions will be furnished with each other.

 Evergreen trees will bring a new beauty and charm to your home. There is unquestionably no better way of beautifying your place than surrounding it with beautiful evergreens. As an ornamental tree Evergreens are unsurpassed. No other trees remain green through summer and winter; none are more beautiful. But while their value in this respect is great, Evergreens are most useful in other ways. They protect houses, stock and crops, from wind, sun and snow. They conserve the soils natural moisture. They form a substantial shelter and nesting place for the birds that rid your acres of worms and destructive insects. They are a source of salable timber for fence posts and other uses. Plant some Evergreens around your garden and just see how much difference there is in the temperature and the moisture. You will find that you can grow flowers, fruits and vegetables that you never could before.

These varieties have been thoroughly tested and proven absolutely hardy and reliable and will grow successfully in all parts of the country. Send in your order now. Shipment will be made during March, April or May—depending on locality.

1.—50 Norway Spruce, Tall Dark Green	2-5 in. 2 yr. seedlings	8.—50 American Arbor Vitae, Conical Deep Green	4-8 in. 3 yr. seedlings
2.—50 Scotch Pine, Tall Bluish Green	2-5 in. 2 yr. seedlings	9.—10 Assorted Evergreens large size	Transplanted 4 years old
3.—50 Douglas Fir, Tall Dark Green 3-6 in. 2 yr. seedlings	3-6 in. 2 yr. seedlings	10.—50 Jack Pine, Tall Bright Green 3-6 in. 2 yr. seedlings	
4.—50 Assorted Evergreens, Five varieties	3-6 in. 2 yr. seedlings	11.—50 Red Cedar, Medium Bright Green	3-5 in. 1 yr. seedlings
5.—50 Colorado Blue Spruce, Tall Silvery Green	3-6 in. 3 yr. seedlings	12.—50 Ponderosa Pine, Tall Dark Green	3-6 in. 2 yr. seedlings
6.—50 White Pine, Tall Lustrous Green	3-6 in. 2 yr. seedlings		Price postpaid, 1.00 per package; any 6 for 5.00. You cannot afford to overlook these offers. THINK OF IT—50 TREES FOR \$1.00.
7.—50 Black Hill Spruce, Tall Bluish Green	3-6 in. 3 yr. seedlings		



Hardy Ornamental Shrubbery

The planting of shrubs, or perhaps combined with shade trees, with some conception as to the effect to be produced in future years, is a matter to be considered by everyone who wishes to complete the picturesqueness of a villa residence or country home. Shrubs around a house hide unsightly corners, and the hard, straight lines of the architecture; or grouped at a distance, by the sides of walks, carriage drives, and fences, they break what might be a monotonous line of vision over bare lots, and give a tone of privacy to the home surroundings. Everywhere one can find places that will suggest their use, and when in flower, or adorned with their bright and varied foliage, their charm and beauty will be appreciated from early spring until late fall when most of them display their brightest colored leaves, to be followed by the red berries of many varieties during the winter months. Those who are not well acquainted with varieties and are doubtful as to what to plant we shall be glad to help in selecting and make suggestions and plans for grouping, for all sites and purposes.

T—Denotes shrubs that grow 12 to 15 feet high

L—Denotes shrubs that grow 8 to 12 feet high

M—Denotes shrubs that grow 6 to 8 feet high

S—Denotes shrubs that grow 3 to 6 feet high

D—Denotes shrubs that grow 2 to 3 feet high

Prices on ornamental shrubs are by express at your expense unless otherwise stated.

ALTHEA. (<i>Hibiscus</i> .) Rose of Sharon.....	50c each
Double Rose.....	50c each
Double Violet.....	50c each
Double Red.....	50c each
Single Blue.....	50c each
Double White.....	50c each
Pure White, Variegated foliage.....	50c each

TREE ALTHEA. Jeanne d'Arc; *Anemoneflorus*; Ardens. 4 to 5 ft. 75c each.

ARALIA SPINOSA (*Hercules Club, Angelica Tree, or Devil's Walking Stick*.) A singular native tree-like shrub, growing from 10 to 15 feet high, with very prickly stems, pinnate leaves and immense pinnacles of white flowers in August, followed by black fruit which makes it attractive until late in fall, an odd tropical looking plant. 50c each.

BARBERRY. B. *Thunbergii*. D. From Japan. A very pretty species of dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge. 18 to 24 inches, 20c each; \$1.75 per 10; \$15.00 per 100.

Purpurea. (*Purple Leaved*.) S. A fine shrub, growing three to five feet high, with violet purple foliage and fruit; blossoms and fruit beautiful; very effective in groups, hedges or planted by itself. 18 to 24 inches, 25c each; \$2.00 per 10; \$15.00 per 100.

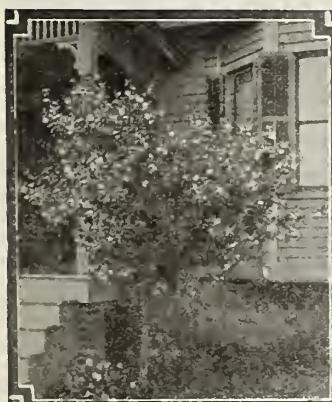
B. Vulgaris. (*Green Leaved*.) M. A handsome, deciduous shrub; flowers yellow, berries dark red. Of upright growth, with light green foliage. 18 to 24 inches, 25c each; \$2.00 per 10; \$15.00 per 100.

BUDDLEIA. (*Butterfly Shrub, or Summer Lilac*) *Variabilis Magnifica*. One of the most desirable summer flowering shrubs beginning to bloom in July, it continues until cut by severe frost. The flowers are of a pleasing shade of violet-rose, and are borne in dense cylindrical spikes, which, under liberal cultivation, are from 12 to 15 inches in length by 3 inches in diameter; it succeeds everywhere and flowers freely the first season planted, and is always admired. 50c each.

CARAGANA (*Pea Tree*.) A handsome dwarf tree with bright yellow flowers in May and June. 5 to 6 feet \$1.00 each.



BARBERRY



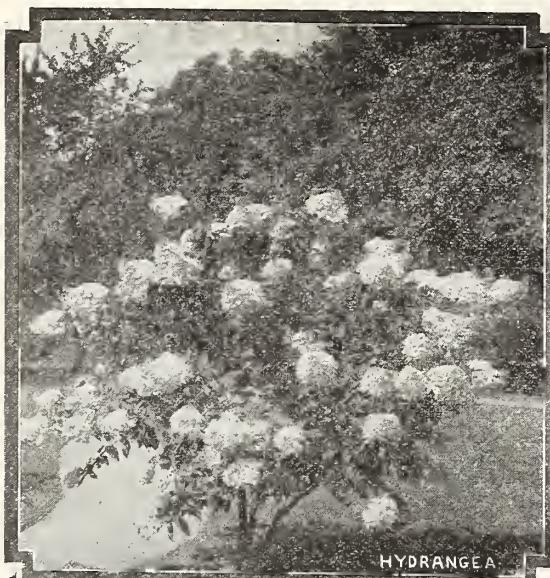
Double Flowering Crab

DOUBLE FLOWERING CRAB. One of the most beautiful of the many fine varieties of flowering crabs. Tree of medium size, covered in early spring with large, beautiful, double fragrant flowers of a delicate pink color. From a distance the flowers have the appearance of small roses. 3½ ft. Large \$1.00.

PRUNUS JAPONICA fl. pl. (*Almond*.) A beautiful dwarf shrub, producing its showy double flowers early in May before the leaves appear. We can supply both white and pink. 50c each.

Bee Supplies

You will find a full list of BEE SUPPLIES on pages 108-115. We handle the A. I. Root goods, which we consider the best on the market in point of workmanship and material used. There is a good profit in Bees.



Lemoinei. Large flowers of pure white borne in cone shaped heads. 50c each.

Pride of Rochester. Grows 6 to 8 feet high, and blooms in May before the others. Flowers large and free; double white. 50c each.

FORSYTHIA (Golden Bell). These splendid old shrubs, growing 8 to 10 feet tall eventually, light up the garden with glinting masses of yellow, very early in spring before the leaves appear. Their bright golden flowers, often appearing before the snow is gone, vie with the Crocus as harbingers of spring.

Intermedia. The earliest blooming. 50c each.

Suspensa. (Drooping Golden Bell.) Flowers bright yellow, and of slender, drooping habit. Suitable for planting on banks or walls where the long branches may trail. 40c each.

HYDRANGEA. Paniculata Grandiflora. This familiar old shrub is one of the most prominent factors during August and September, in brightening up the lawn and shrubbery groups. Single specimens, if planted in rich soil and severely pruned every spring before the leaf buds open, will get to be very dense, stocky clumps of compact form, and are wonderfully attractive when laden with their massive white plumes. Large beds, kept at a uniform development, are extremely showy; first snowy white, then pink, then reddish bronze and green. 60c each.

Arborescens Grandiflora. (American Everblooming.) A grand addition to the summer flowering hardy shrubs; dwarfing the show of other sorts in July and August by the magnitude and profusion of its flower-heads. The flowers are, in a large way, similar to the familiar "Snowball" in appearance, and are conspicuously white and imposing, whether as single specimens, as cut flowers, or in grouping. 60c each.

Tre Shaped. Very desirable in this form, in formal lines and back-grounds. 3 to 4 ft. 75c each.

LONICERA (Bush Honeysuckle). The upright Honeysuckles have bright and pretty fragrant flowers followed by showy berries that last through the fall. Make desirable and attractive hedges.

Alberti (Siberian Honeysuckle). Dwarf bushy growth, about 2 feet, with silvery, pinnacle foliage; fragrant, violaceous pink flowers in June. 50c each.

Tatarica Grandiflora Alba. A variety of upright habit, with very large, pure white flowers. 50c each.

Tatarica Rosae. The best known of all the Bush Honeysuckles, and in our estimation the finest variety of all. Grows to a height of 8 to 10 feet with upright somewhat spreading branches and bright green foliage. The flowers are borne freely in May and June, are of bright pink color, followed by showy red berries, which ripen in mid-summer and cling to the bush for several weeks. This fine shrub is of great value planted as a background for smaller shrubs. It withstands successfully the severest winters. 50c each.

CORNUS (Dogwood). The shrubbery Dogwoods are mainly valuable for the brilliancy of their barks and berries and the handsome variegation of their foliage.

Lutea. A yellow barked dogwood which gives a very beautiful effect in winter, when contrasted with the Siberica. 35c each.

Sibirica. Grows 6 to 10 feet high, with clusters of fine white flowers, succeeded by a fall crop of ornamental berries, stem and branches turning to blood-red in winter. 30c each.

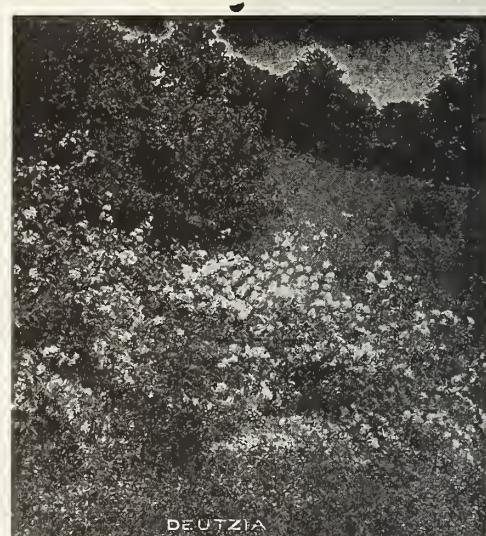
Stolonifera. (Red Ozier Cornel.) Medium sized and spreading, with dark red bark and white flowers, berries white. 35c each.

CYDONIA JAPONICA (Japan Quince). Very early in spring, this fine old shrub is completely covered with dazzling scarlet flowers, followed by small, quince-shaped fruits which are quite fragrant. Growth bushy and dense, with protecting thorns. 40c each.

DEUTZIAS. Valuable, self-sustaining shrubs which vary considerably in height and habit, but bloom alike in dainty bell or tassel-shaped flowers borne thickly in wreaths along their branches in June. The taller sorts are useful for specimens groups, and the background of shrubberies, the dwarfer for borders or for planting near the house.

Crenata. Distinct from all others; white. 40c each.

Gracilis. A favorite dwarf bush, covered with spikes of pure white flowers in early summer. 40c each.



LILAC (Syringa). This group is so well known that there is no need of extended description. To reach perfection, should have a moist, rich soil.

Syringa (Persian). Native of Persia; from four to six feet high with small foliage and bright purple flowers. **Each 50c.**

Common Purple. Bluish purple flowers. **Each 25c.**

White. A beautiful variety; has very large, pure white panicles of flowers. **Each 50c.**

PRIVET (Lingustrum). Besides being one of our best hedge plants, the various species of Privet form interesting groups on the lawn. They are almost evergreen; of dense compact habit. The flowers are fragrant and are followed by pretty sprays of different colored berries.

Amoor River. Much hardier than any other. Stood last winter without killing. The foliage is glossy green, holding its color almost the entire year. Will stand any kind of shearing. 18 to 24 inches, well branched. **\$2.00 per 10.**

Ibota. A valuable hardy Privet of the West and Northern states. It is almost evergreen and grows rapidly in all soils. Compact and regular in form and bears shearing to any extent. Flowers white and fragrant. Leaves long and shiny. A charming shrub for hedges or specimens on the lawn. 18 to 24 inches, well branched. **\$2.00 per 10.**

Regelianum. A handsome Japanese Privet, with spreading branches and dark green foliage, contrasting well with the racemes of fragrant white flowers in summer; elegant and graceful as an isolated specimen. **40c each.**

PYRUS ARBUTIFOLIA (Black Chokeberry). A tall-growing shrub with light green foliage; small pinkish flowers in May; and shiny black berries late. **40c each.**

SAMBUCUS (Elder). Although these shrubs are attractive in flowers and fruit, they are chiefly grown for their beautiful leaves.

Acutiloba (Cut-leaved American Elder). No more beautiful ornament to the grounds can be planted; its great handsome cymes of delicate white, fragrant flowers in June and July creating a most artistic effect. They are followed by large clusters of fruit. **50c each.**

RHUS AROMATICA (Fragrant Sumac). Grows 2 to 4 feet tall; flowers yellow in clusters along the stems, followed by red berries in June. Leaves color to brilliant scarlet in fall.

Purple Fringe (R. Continus). L. A much admired small tree or shrub for its curious fringe of hair-like flowers that cover the whole surface of the plants in mid summer. **50c each.**

Common Sumac (R. Glabra). 6 to 8 feet. The brilliant-colored foliage in autumn makes fine contrast with a dark background. Can be used with good effect in landscape work. **50c each.**

Staghorn Sumac (R. Typhina). A large shrub or tree. Brilliant foliage and scarlet fruit in autumn. **50c each.**

Cut-leaf Sumac (Var. Lacinata). 4 to 5 feet. A very striking plant of medium size, with deeply cut leaves resembling fern leaves, dark green above and glaucous below, turning to a rich red in autumn. **50c each.**

RIBES (Flowering Currants). Hardy, bushy shrubs growing 8 to 10 feet high, prized on account of their early spring flowers; bright berries and dark; and pretty richly coloring foliage.

Aureum (Golden Currant). Yellow flowers and dark brown fruits. **40c each.**

Sanguineum (Red Flowering Currant). Red barked twigs; and reddish purple flowers. **50c each.**

SYRINGA (Philadelphus). Also known as Mock Orange. Are mostly large shrubs, growing from 6 to 10 feet high. Of various habit, very hardy, with large, handsome foliage and beautiful white flowers produced in great profusion. They merit a place in every collection of shrubbery.

Grandiflora. Very large flowers in June. Fine. **50c each.**



Syringa



Japanese Quince

Seward County, Nebr., April 16, 1917.

Dear Sirs:

I received my flower plants a few days ago and they were the best and finest I ever received from a greenhouse. You will sure get a good fall order for bulbs from me.

Yours very truly,

IDA AUSTINE.



Purple Fringe
very showy. 50c each.

S. Opulifolia (Nine Bark.) M. A strong growing shrub with white flowers. 40c each.

Sorbifolia (Ash-leaved Spirea). A vigorous species, with leaves like that of the mountain Ash, long, elegant spikes of white flowers in July. 50c each.

S. Thunbergii (Thunberg's). S. Dwarf habit and round, graceful form, branches slender and somewhat drooping; foliage narrow and yellowish green. Flowers small white. Esteemed on account of its neat, graceful habit and early blooming. 50c each.

S. Van Houtte. M. The grandest of all the Spireas. It is a beautiful ornament for the lawn at any season, but when in flower it is a complete fountain of white bloom, the foliage hardly showing. Clusters of twenty to thirty flat, white florets make up the racemes, and these clusters are set close along the drooping stem. Perfectly hardy and an early bloomer. 40c each.

SYMPHORICARPUS RACEMOSUS (Snowberry). Fructo Alba. A well-known dwarf with small, pink flowers and large white berries that hang on the plant the greater part of the winter. 40c each.



Weigelia

Aurca (Golden Elder). Contrasted with other shrubs, the golden yellow leaves of this Elder give heightened effects in tone and color. Flowers white, in flat-topped cymes. Grows naturally 10 to 15 feet, but can be pruned into a neat, compact little bush. 50c each.

SNOWBALL VIBURNUM—Opulus Sterilis (Common Snowball). L. An old and well-known shrub, bearing large balls of pure white flowers. 50c each.

Opulus (High Bush Cranberry). L. Very ornamental berries resembling small cranberries, hang until destroyed by frost late in fall. 50c each.

SPIREA (Meadow Sweet). An indispensable class of small to medium-sized shrubs, embracing a wide range of foliage, habits of growth, color of flowers and season of blooming. All of easiest culture in all soils.

S. Anthony Waterer. D. A new crimson-flowered variety. It makes a low, compact bush, 15 to 18 inches high, and is covered nearly the whole growing season with large umbels of deep crimson flowers. Perfectly hardy, it makes a fine, compact plant for low clumps or for bedding purposes. 40c each.

S. Billardii. M. Medium sized shrub, producing spiked panicles of flowers, bright rose colors. 40c each.

S. Collosa. M. A choice species; flowers in flattish umbels, bright pink and



BRIDAL-WREATH.

Vulgaris (Indian Currant). Similar to the Snowberry except that its fruits are red, and that the smaller red berries cluster in thick ropes about the weighted-down stems. Growth is also more compact and formal, comparing well with the Privets for hedges. 40c each.

TAMARIX (Tamarisk). The Tamarisks are hardy shrubs, of strong growth, foliage light and feathery, their flowers delicate and fringing, usually in some light shade of red or pink. They will grow anywhere. 40c each.

WEIGELIA. A valuable family, handsome in foliage as well as flowers. Are easily grown and adapted to a variety of soils. The flowers are trumpet-shaped and are borne thickly in clusters along the stems.

D. Candida. M. Of vigorous habit, flowers pure white and produced in great profusion in June, and continue to bloom at intervals through the summer. 50c each.

D. Eva Rathke. M. A charming new Weigela; flowers brilliant crimson; a beautiful, distinct, clear shade. 60c each.

D. Rosea. M. One of the most popular shrubs known. Flowers bright rose. 50c each.

No park space, lawn, or large grounds of any kind are complete without a Persian Lilac, Spirea Van Houtte and a Tamarix Shrub.

Treatment of Trees That Have Been Frozen in the Packages, Received During Frosty Weather, or After Long Exposure. Place the package, unopened, in a cellar or some such place, cool, but free from frost, until perfectly thawed, when they can be unpacked and either planted or placed in a trench until convenient to plant. Treated thus they will not be injured by the freezing. If dried from long exposure bury entirely under the ground, soaking well with water, or place in water from 2 to 24 hours, and prune more closely than ordinarily.

Hardy Climbing Vines

ORDERS SHOULD REACH US BY MAY 1, AT THE LEAST

Your home, out-buildings, fences and trunks of old trees can be made very attractive by the use of hardy vines. Such permanent improvements add greatly to the value of your property, and the value increases from year to year. We furnish nice, strong, field grown plants at prices given below.

HONEYSUCKLES

For real handsome vines, to be near you, climbing over your windows and doorways, there is nothing prettier than sweet-scented Honeysuckles; the foliage is pretty, neat and clean, the flowers are almost continuous, and their fragrance delicious.

Honeysuckle Hedges

Some of our friends have conceived the idea of planting Honeysuckles along the division fences, and it is wonderful what pretty hedges they make. Iron or wire fences are the best, but almost any kind is soon covered with a mantle of living green. Other climbing vines will answer the purpose, but the sweet-scented Honeysuckles are both fragrant and beautiful. They should be planted two feet apart.

MONTHLY FRAGRANT. Red and yellow; very fragrant. Blooms all summer; leaves tinged reddish color. Large size only 45c; postpaid.

HALLS JAPAN. A good strong growing, almost evergreen sort, with pure white flowers, changing to yellow. Very fragrant and covered with flowers from July to November. Large size 45c; postpaid.

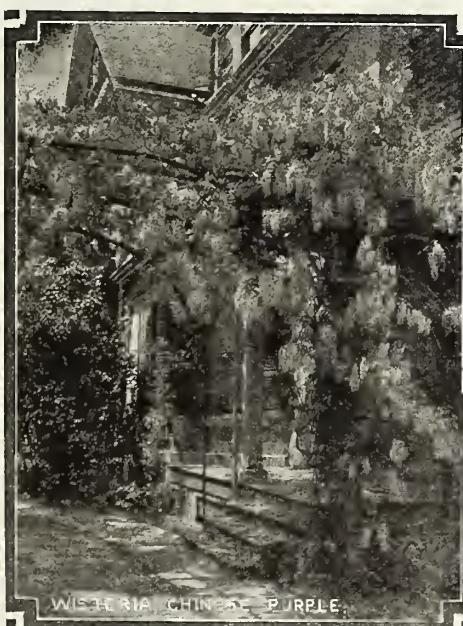
SCARLET TRUMPET. Red trumpet-shaped flowers; blooms freely, vigorous and rapid growing. Large size 45c; postpaid.

YELLOW TRUMPET. Golden trumpet-shaped flowers; fragrant. Large 45c; postpaid.

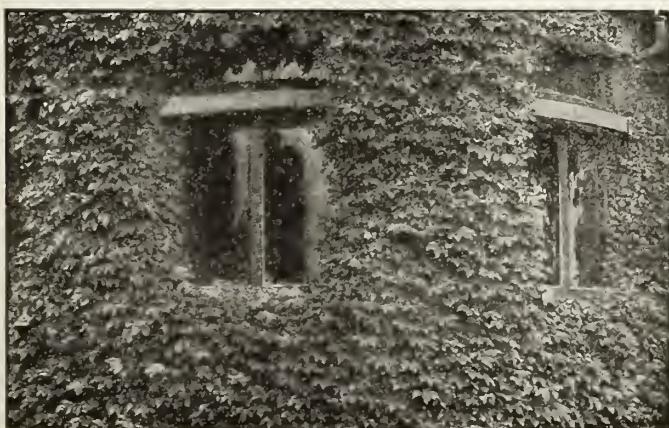
WISTERIA

The Wisteria is particularly valuable for training over buildings, second floor verandas and wherever tall-growing climbers are wanted it is a vigorous rapid grower, entirely hardy. The flowers are borne in large clusters.

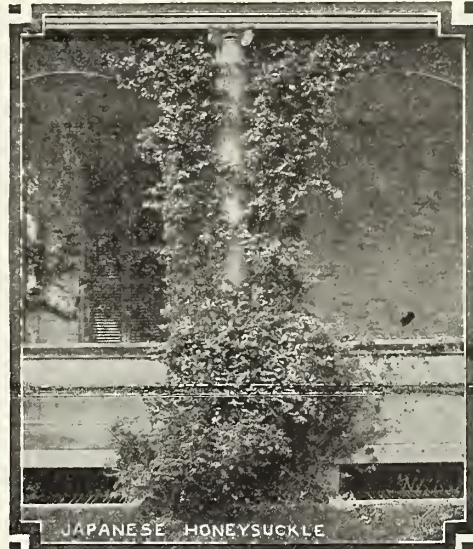
CHINESE PURPLE. Of lovely, rich, violet-purple color, deliciously scented; handsome. Large size 50c each; postpaid.



WISTERIA CHINESE PURPLE



Virginia Creeper



JAPANESE HONEYSUCKLE

HARDY IVES

Ampelopsis Quinquefolia—(Virginia Creeper). A native vine of rapid growth, with large, luxuriant foliage, which in autumn assumes the most gorgeous and magnificent coloring; perfectly hardy; the best climber for Nebraska. 45c each.

Ampelopsis Englemanni. Of denser growth, shorter jointed and richer in effect than the quinquefolia. Grows six to ten feet in a season. Will cling to a brick wall without any extra support. 45c each.

BIGNONIA (Trumpet Creeper.) Scarlet trumpet flowers with long, handsome, dark green foliage and quite showy clusters of orange and scarlet flowers during the summer. Large only, 45c each; postpaid.

CINNAMON VINE. A beautiful hardy climbing vine, which will quickly surround an arbor, window or veranda with a profusion of vines covered with handsome, glossy, heart-shaped leaves,

bearing great numbers of delicate white blossoms, which emit a delicious cinnamon fragrance. We know of no vine that is more satisfactory, being perfectly hardy, thriving everywhere, and when once planted will grow for many years and be a source of constant delight. The vines quickly make long shoots 25 feet or more in length, and can be used for all purposes where a beautiful climbing vine is needed. Plant the bulbs about one inch deep in rich soil, and with the approach of winter cover lightly with straw and leaves to prevent freezing. 2 for 15c; 4 for 25c; postpaid.



Jackmanii

Clematis

There is no more ornamental class of plants than Clematis and the rich show of bloom produced by the best varieties is far too magnificent to be fairly portrayed by mere words. The colors run from intense velvety-purple, through crimson, blue, lavender and white. We presume that every one of our customers who sees Clematis plants in bloom each summer promises to plant some in his own garden or yard at the next opportunity. Here is the opportunity. They are especially adapted to our climate.

LARGE FLOWERING VARIETIES

HENRYII. A vigorous grower and a free bloomer, producing its large, pure white flowers constantly during summer and early autumn. The best large-flowered variety producing pure white flowers. \$1.00 each; postpaid.

JACKMANII. The flowers are large, intense rich velvety violet-purple and are produced in such masses as to form a cloud of bloom. Well known and very popular. \$1.00 each postpaid.

SMALL FLOWERING VARIETIES

PANICULATA. One of the most valuable of all hardy flowering vines. Of exceedingly rapid growth, soon reaching a height of fifteen to twenty feet and spreading out in all directions. Small, pure white flowers, borne in great masses of panicles or clusters on long stems, so profuse as to fairly cover the plant with a sheet of fleecy white. Its blooming period is in August and September, when most other vines have ceased, and it is then a sight to behold. Not its least charm is its delightful Magnolia-like fragrance. Hardy as an oak. Strong two-year field plants to bloom this year, 40c each; postpaid.

Roses

NOTE: The "large" roses are 2-year-old field grown; "small," 1-year-old pot grown. Order in spring, not later than June 1st.

To obtain the most satisfactory results, roses should be planted in well drained, rich deep loamy soil, and given a location where they have sunlight and a circulation of air. For winter protection an application of composite or rotten manure should be given them in the late autumn, and spaded into the ground the following spring.

NOTICE: If the plants look wilted when received put them in lukewarm water for 15 or 20 minutes. Set the plants about 2½ inches deeper than they were growing before and press the soil firmly around the roots. Give them a good watering. Shade from sun and wind until they begin to grow.

Teas and Hybrid Teas

KILLARNEY. (The Irish Beauty.) Brilliant sparkling pink with large, pointed buds, broad, wax-like petals with silvery edges and enormous semi-full flowers of exceeding beauty. One of the very finest forcers and has become the type for a numerous family. Small 15c each; large 35c; postpaid.

KILLARNEY BRILLIANT. Newest member of its family and expected to push Killarney, its parent, off the field. Color varying from crimson-pink in winter to a bright, true pink in hot weather, brilliant throughout the year. As free a producer and a trifle stronger than the parent, with nearly double the petalage. First year's sales enormous. Small 25c each; large 60c; postpaid.

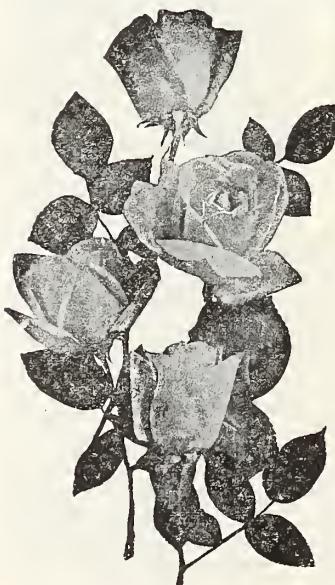
KILLARNEY QUEEN. A cerise pink sport from Killarney, unequaled for clearness and brightness of color, with petals larger than in the parent, and its perfect foliage likewise larger and more glossy. Small 20c; large 50c; postpaid.

WHITE KILLARNEY. A pure white sport from the pink parent above described. Identical with the pink variety except in color. Small 15c; large 35c; postpaid.

KAISERIN AUGUSTA VICTORIA. Pure white, does not pink when planted out; splendid, large buds and superb, full, double blooms, making the choicest cut flowers. A most sturdy grower, blooming steadily from early spring until late frost. Small 15c each; large 35c; postpaid.

LA FRANCE. Silvery-rose, with pink shades and satin-like petals of unsurpassable beauty; large, symmetrical and deliciously fragrant blossoms from June until frost; hardy with protection. Small 15c each; large 35c; postpaid.

LEMON QUEEN. Lemon-yellow. The build of the flower is a refined "Druschki." The fragrance is delicious and is a desirable attribute. A rose par excellence. Small 25c each; large 50c; postpaid.



Killarney

Bee Supplies

We carry a complete line of A. I. Root's Hives and Supplies in stock. See pages 107 to 113.

Tea Roses--Continued



Radiance

THE BRIDE. (White Tea Rose.) Flowers very large on long, stiff stems. They last a long time after being cut, making it one of the best for bouquets. Sometimes a pinkish white in hot weather but usually a pure white. **Small 15c each; postpaid.**

BRIDESMAID. Clear, shining pink, buds of exquisite shape; stems long and stiff; a profuse bloomer. A leader of pink forcing roses since 1893, and likewise on outdoor favorite. **Small 15c each; large 50c; postpaid.**

CLOTHILDE SOUPERT. A really wonderful Rose for bedding out or for pot culture; medium size and very double; white, shading to deep pink at center; a profuse grower and a strong dwarf grower, deliciously fragrant. **Small 15c each; large 50c; postpaid.**

HERMOSA. Popular for many years; cup-shaped, finely formed and full of flowers of soft, deep pink; ever-blooming, beautiful and hardy. **Small 15c each; large 50c; postpaid.**

METEOR. Intense velvety-crimson, buds and blooms large, elegantly formed, fully double and borne on nice, long stems, with healthy, bright foliage of the deepest green. Brilliant and highly popular. **Small 15c each; large 40c; postpaid.**

OPHELIA. Brilliant salmon-flesh shaded with rose on outer edges of petals with a heart of glowing peach-pink and orange-yellow blendings, all passing finally to lighter shades; fragrant as Richmond, faultless form in bud and flower; erect habit, stiff, long stems; free and continuous in growth and bloom; handsome, bright foliage; immune to mildew and black spot; possesses every requisite of a perfect forcing rose. **Small 40c each; large 75c; postpaid.**

RADIANCE. Brilliant rosy-carmine, shaded with rich opaline-pink tints in the open flower, which is large, full, of fine form, with cupped petals. A constant and fragrant forcer, producing strong, upright canes and an excellent keeper in summer. Seedling from Cardinal. **Small 15c each; large 40c; postpaid.**

PINK SOUPERT. Rose-pink in color; otherwise same as Clothilde Soupert; always in bloom. **Small 15c each; postpaid.**

MAMAN COCHET. Rich, rosy-pink, shaded silvery-rose on outer petals; exquisite in color and graceful in form from bud to bloom and delightfully fragrant; beautiful, healthy foliage and long, stiff stems. Unquestionably the queen of pink Tea Roses and a leading cut-flower variety. **Small 15c each; large 35c; postpaid.**

WHITE MAMAN COCHET. Identical with its parent, Maman Cochet, in everything except color.

Has same freedom of bloom and magnificent form of buds and flowers and the same hardiness. Vigorous and hardy nearly everywhere. **Small 15c each; large 35c; postpaid.**

SUNBURST. This magnificent giant yellow Rose is a fine forcer; it stands head and shoulders above all others of its color and will rank with American Beauty, and the Killarneys in value and grandeur. The color is orange-copper or golden-orange and golden-yellow; edge of petals lighter. Some call the color cadmium-yellow. It makes no difference what you call its color, it is the yellowest of all roses in the ever-blooming class. Belongs in the class of big Roses. It puts all the yellows to sleep when it comes to bedding in the garden. The golden-yellow color stays right with the flower until it fully finishes. Better get acquainted with "Sunburst." **Small 25c each; large 60c; postpaid.**



White Maman Cochet

Our Best Rose Collection

**13 Ever-Blooming Tea
Roses for \$1.00**

POSTAGE PREPAID

They will delight you with exquisite and abundant bloom. This offer cannot be excelled either in quantity or quality. This collection is strictly of our own selection, and we guarantee them to be well rooted, to reach you in good condition, and be a fine assortment of colors, all correctly labeled. This offer is only made to induce you to give us a trial, and it will be to our interest to send only a fine assortment of good Roses, well rooted, that are sure to bloom freely the first year.

Hybrid Perpetual Roses

AMERICAN BEAUTY. (Mme. Ferd. Jamin.) Generally conceded to be the most grandly beautiful of Roses in size, form and color. Rich red, passing to crimson, very delicately veined and shaded and surpassingly fragrant. A hardy ever-bloomer and rapid grower. Small 25c each; large 60c; postpaid.

BOULE DE NEIGE. (Ball of Snow.) Pure white, showing light flesh upon opening; elegantly formed, very full and double, with beautifully shaped petals evenly arranged; hardy. Small 15c each; large 50c; postpaid.

J. B. CLARKE. Intense scarlet, shaded crimson-maroon, very dark and rich, and sweetly fragrant; petals large, deep and smooth; extremely high pointed center; foliage bronzy-green changing to dark green; growth strong and upright, making a large, handsome bush. Small 15c each; large 50c; postpaid.

FRAU KARL DRUSCHKI. (The White American Beauty, or Snow Queen.) An everyday hardy, vigorous grower, with bright green leaves, delicately veined; splendid long buds and magnificent snow-white blooms with large saucer-shaped petals. Rightly named and deservedly a prize winner. Small 25c each; large 50c; postpaid.

GENERAL JACQUEMINOT. A celebrated and much sought after variety, both for planting out and pot forcing; shapely buds and handsome blooms of bright, shining crimson, rich, brilliant, velvety and fragrant. Everybody knows and wants the "Jack" for its all 'round' good qualities. Small 15c each; large 50c; postpaid.

GRUSS AN TEPLITZ. (Greeting to Teplitz, or Virginia R. Coxe.) Hardy in all sections; grows freely to a height of four to five feet; vivid, dazzling, fiery crimson; sweetly fragrant; produces a mass of gorgeous blooms on long stems. Small 15c each; large 50c; postpaid.

HUGH DICKSON. Brilliant crimson, shaded scarlet; very large and beautiful in form, with large, smooth petals, slightly reflexed on the edges. A vigorous grower, with handsome foliage; very fragrant. Small 15c each; large 45c; postpaid.

MADAME PLANTIER. A June Rose, well worthy of its long and continued popularity. Pure white, large and double; hardy as a forest tree; a free and continuous bloomer of the best white Hybrid Perpetuals, used extensively for cemetery planting. Small 15c each; large 45c; postpaid.



White American Beauty

MISTRESS JOHN LAING. Beauty in clear, bright, shining pink; each bud in its long, serrated calyx with adjacent green foliage, forms a dainty and lovely boutonniere; immense, full bloom on long stiff stems - sweetly scented. Small 15c each; large 50c; postpaid.

PAUL NEYRON. The largest of all Rose blooms; bright, shining pink, clear and beautiful; very double and full; finely scented; blooms first season and all summer. Grows to a great height in a single season and stems are almost thornless. Small 15c each; large 50c; postpaid.

PINK FRAU KARL DRUSCHKI. (George Arends.) This is the wonderful "Pink Druschki." Do not confound it with the much inferior sort "Heinrich Munch" which is being offered in some quarters as "Pink Druschki." This Rose we predict will have as large a following and be as widely planted in a very few years as the now famous "White Druschki." We have looked it over in the field and grown it in pots for the market and we absolutely cannot detect a single fault in it or about it.

The growth and make-up of the plants is superb, while the delicate pink color is unapproachable. Small 35c each; large 75c

PRINCE CAMILLE DE ROHAN. (La Rosiere.) Universally known as "The Black Rose," owing to its very deep, velvety crimson color, passing to intense maroon, and shaded black; large, handsome and fragrant blooms. Small 15c each; large 50c; postpaid.

ULRICH BRUNNER. Brilliant cherry-red flowers of immense size and bold globular form. Seedling of Paul Neyron, strong and disease resisting. Small 15c each; large 45c; postpaid.



Gen. Jacqueminot

See how to get Garden
Seed Free Page 21



Crimson Rambler

EXCELSA. (Red Dorothy Perkins.) Intense crimson-scarlet; double flowers in brilliant clusters set in glossy, shining foliage which never mildews nor spots. An intensified Crimson Rambler, which it promises to displace. Extremely vigorous and the handsomest of all the red climbers. Small 20c each; large 50c; postpaid.

WHITE DOROTHY PERKINS. Pure white sport from Dorothy Perkins, with which it is identical in foliage and habit. A valuable addition to the hardy climber class. Small 15c each; large 45c postpaid.

SHOWER OF GOLD. Deep golden-yellow orange flowers borne in splendid trusses forming a mass of bloom. Extremely long laterals are densely clad with a beautiful Wichuriana foliage, the leaves on upper side a vivid, glossy green, the under side and stems a reddish-brown shot with a silvery sheen. Small 20c each; large 75c; postpaid.

TAUSENDSCHOEN. (Thousand Beauties.) Verying shades from a delicacy flushed white to a deep pink or rosy-carmine, in bright clusters of blossoms almost covering the handsome pale-green foliage. A vigorous hardy climber with few thorns, of German origin. Small 20c each; large 60c; postpaid.

Norton County, Kan., Mar. 3, 1917.

Dear Sirs:
We have used Griswold's seeds for eight years and think we can't raise a garden without them. The tomatoes I find especially good.

Yours Respectfully,
MRS. ELI GALLENTINE.

WINTERING NURSERY STOCK PROCURED IN THE FALL

In sections where the winters are very severe, it is not advisable to set out young trees and plants in the fall but the practice of procuring them in the fall, covering them with earth during the winter and planting them in the spring is becoming more and more popular, as experience has demonstrated its advantages. In the fall, nurserymen are not hurried in their own planting; the season for shipping them is comparatively long, and the weather not nearly so changeable as in the spring.

Hardy Climbing

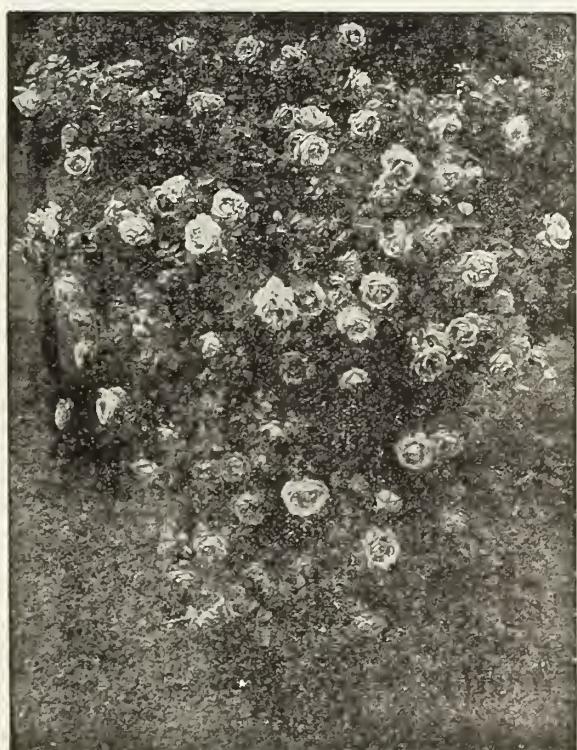
Roses

This class of roses need some protection in this climate, that is, states north of Kansas. A good plan is to lay them down and cover with straw or leaf mulch. It is freezing and thawing alternately that kills rose bushes.

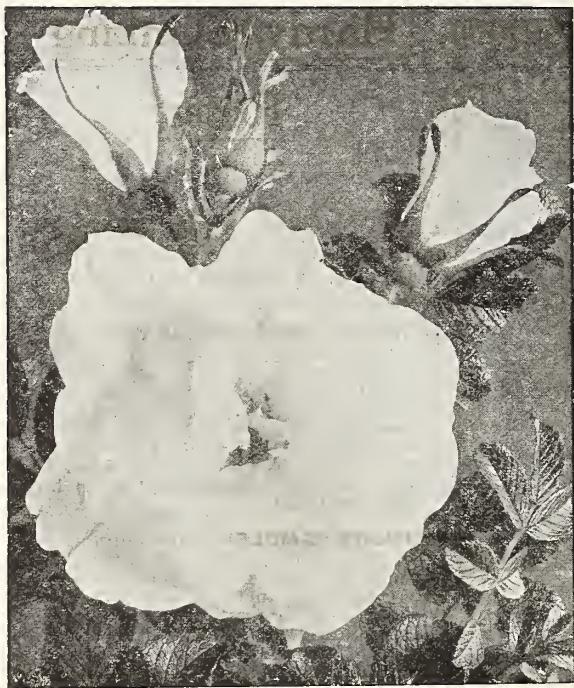
CLIMBING AMERICAN BEAUTY. Seedling from American Beauty with an admixture of Wichuriana and Tea blood. Same as its namesake in size color and fragrance, with the addition of the climbing habit. Better blooming qualities, good foliage, and has proven hardy and withstood heat and drought. Small 20c each; large 60c; postpaid.

CRIMSON RAMBLER. Most popular out-of-door climber of today; a rapid producer of long, heavy canes, reaching a height of ten to twenty feet in one season; rich clusters of bloom from a mass of vivid-crimson beauty until late in the season. Perfectly hardy in the most trying climates being a native of Japan. Small 15c each; large 50c; postpaid.

DOROTHY PERKINS. Beautiful shell-pink color which holds for a long time, fading finally to a lovely deep rose; very sweet-scented; fully equal to Crimson Rambler in foliage, hardiness, habit of growth and blooming qualities. Small 15c each; large 45c; postpaid.



Climbing American Beauty



Rugosa

WHITE BABY RAMBLER. Pure snow-white, double, blooms in profuse clusters, making a sheet of white color, with a fragrance similar to Hyacinths. Compact, bushy grower or dwarf habit; foliage dark, glossy and finely cut; ever-blooming and hardy. Small 15c each; large 40c; postpaid.

Rugosa Roses

This class of roses is especially adapted to hedges, or for shrubbery collections, the splendid foliage, the flowers and later the seed pods, makes this class one that should be more largely used in landscape work.

CONRAD FERDINAND MEYER. Pure, silvery-pink, surpassing all others of the Rugosa family in beauty of color and fullness of form; fragrant and hardy; will not mildew nor black-spot; handsome in foliage and valuable as an ornamental shrub. Large 50c each; postpaid.

SIR THOMAS LIPTON. The best pure white Rugosa Rose. Strong and vigorous; grows four feet high. Flowers perfectly double, pure snow-white. Fragrant, borne on stems continuously throughout the season. Absolutely hardy everywhere. Splendid for hedging, cemetery and park work. Small 25c each; large 60c; postpaid.

Moss Roses

MOUSSELINE. Pure white flower, buds heavily and beautifully mossed. Small 25c each; large 50c postpaid.

PRINCESS ADELAIDE. Bright rosy-pink; large; double and fragrant; buds beautifully mossed. Small 25c each; large 50c; postpaid.

Polyantha or Baby Ramblers

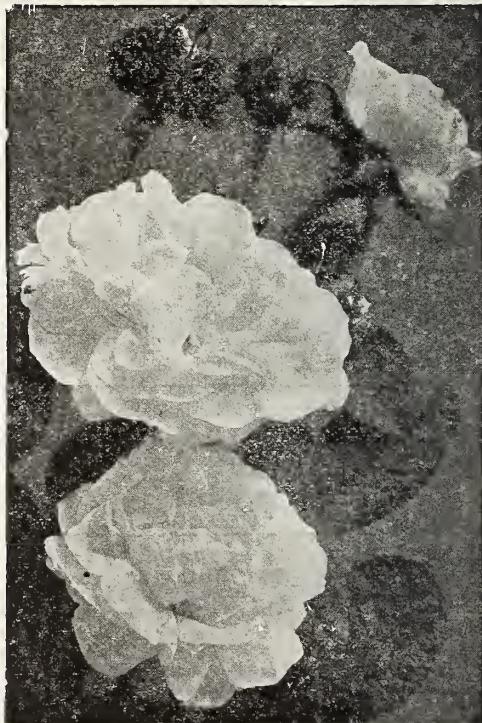
BABY RAMBLER. The Crimson Rambler in dwarf form, with same clear, brilliant, ruby-red color. Hardy and healthy everywhere, attaining a height of twenty inches, and blooming in profuse clusters until frost, and throughout winter if taken indoors. Small 15c each; large 40c; postpaid.

BABY DOROTHY. (Pink Baby Rambler.) A prolific producer of pure pink flowers, with all of the good qualities of Crimson Baby Rambler. Small 15c each; large 40c; postpaid.

BABY TAUSENDSCHOEN. This Rose was formerly named "Louise Welter." Flowers are large and so much like Tausendschoen that it has been rechristened "Baby Tausendschoen". It is a bush form of the "Climbing Tausendschoen" or "Thousand Beauties," having all the charm in the variable colorings in its flowers that its parent has, being firm white, delicately flushed pink, changing to deep rosy-carmine. This is a splendid Rose. Try it. Small 20c each; large 50c; postpaid.

ERNA TESCHENDORFF. Carmine-red sport from and fuller than Mme. Norbert Levavasseur, of fiery color similar to Gruss an Teplitz; never blues. Blooms from May to end of October. Claimed the newest and best of the Baby Rambler class; a medal winner. Small 20c each; large 50c; postpaid.

ANNA MULLER. This rose is very much the same as Crimson Baby Rambler, except in the color of its flowers, which are a shiny, brilliant pink, produced in the greatest profusion in large clusters. It is a splendid companion to the other excellent members of this family. This is the original pink Baby Rambler. Small 15c each; large 50c; postpaid.



Moss Rose

Hardy Perennial Plants

Plants of this class are perfectly hardy in the open ground; they die down to the ground but only to the ground in the winter; once planted they are a lasting pleasure. Failure with them is practically impossible. Orders should reach us by April 15th though in some seasons we can continue to supply this stock up to May 1st.

NOTE—We can only supply perennial seed of varieties where it is listed

ACHILLEA (Yarrow Milfoil.) Free flowering plants of easy culture well adapted for the mixed hardy border. The Achilleas are very hardy and give a wealth of bloom the entire summer.

THE PEARL. Pure white flowers in immense clusters; fine for cemetery planting. 10c each.

Ageratum. June-August. Yellow, very fragrant flowers. Seed pkt. 5c; plants, 10c each.

ACONITUM (Monkshood.) Handsome herbaceous plants with bold spikes of hood-shaped flowers, thriving in either shade or sun. 2½ ft. Aug.-Sept. Rich dark blue. Seed pkt. 5c; plants, 25c each.

ALYSSUM (Madwort)

Saxatile Compactum. (Basket of Gold.) 1 foot. May-June. Greatly prized for its masses of brilliant golden yellow flowers. Seed pkt. 5c; plants 15c each.

Silver Queen. Beautiful pale lemon blossoms. Plants 15c each.

ANEMONES (Wind Flowers.) Very pleasing for herbaceous border. Fine large flowers. Excellent for bouquets and table decorations.

Coronaria (Poppy Anemone). 10 inches. June. Mixed colors. Seed pkt. 5c; plants 15c; clumps 25c.

AQUILEGIA (Columbine). The Columbines are one of the most elegant and beautiful of the hardy plants, producing their graceful spurred flowers on stems rising 2 feet or more above the beautifully divided foliage.

Cerulea. (Rocky Mountain Columbine.) 3 ft. One of the most beautiful of its class. Sepals, deep blue; petals white. Plants 15c each.

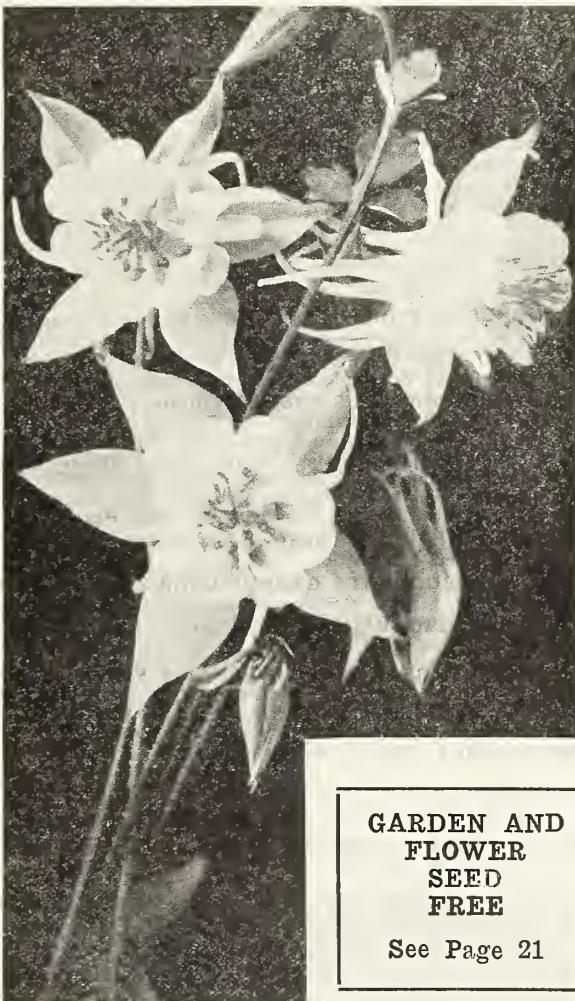
Single Mixed. Many shades and colors. Seed pkt. 5c; plants 15c each; large clumps 35c.

ASTER (Michaelmas Daisies.) Michaelmas Daisies now fill a most important place in all hardy flower gardens, with their masses and clouds of a dainty and brightly colored blossoms throughout the autumn months up to November, when other flowers are scarce.

Mixed varieties in the finest array of sizes and colors. Seed pkt. 5c; plants 15c each; extra large clumps 35c; collection of 4 varieties 50c.

CAMPANULA. (Original Canterbury Bells.) The old-fashioned sort, with beautiful bell-shaped blossoms. We offer in four different colors or mixed. Dark Blue, Light Blue, Rose and White. Mixed, Seed pkt. 5c; plants, 10c each.

CARNATION. Popular favorites, which are deliciously fragrant colors extremely rich and beautiful, if protected will live out over winter. Mixed Plants, 15c each.



Aquilegia

**GARDEN AND
FLOWER
SEED
FREE**

See Page 21

DAISY (Giant Shasta.) This is the largest of the Moon Penny Family and was originated by Burbank, who experimented extensively with this flower. Seed pkt. 5c; plants 15c; large clumps 25c.

COREOPSIS (Lanceolata Grandiflora). 2 to 3 feet. One of the most popular hardy plants. The flowers are of a rich golden yellow and of graceful form and invaluable for cutting. The main crop comes during the latter part of June but continues in bloom the entire summer and autumn. Will succeed in any soil. Seed pkt. 5c. plants 20c each.

DICENTRA SPECTABILIS (Bleeding Heart). An old-fashioned favorite; its long racemes of graceful heart-shaped flowers are always attractive and is always at home in any part of the hardy border, and especially valuable for planting in the shade. Our stock of this perennial is the finest we have seen. Plants 15c each; extra large clumps, 25c.



Bleeding Heart

DIGITALIS (Fox Gloves.) A handsome and highly ornamental plant of stately growth, succeeding under almost all conditions and with but little attention will give a wealth of flowers during June and July. They require protection in winter. We furnish them in Purple, Rose, White and Yellow. Plants 15c each.

Mixed Varieties. Sced pkt. 5c; extra large clumps, 25c.

OLD FASHIONED LARGE FLOWERING HARDY CHRYSANTHEMUM. We offer five fine large flowering varieties which have proven absolutely hardy in this latitude, having withstood the severe winters of 1911 and 1915 without injury.

Autumn Glow. Rosy crimson. Plants, 15c each.

Golden Queen. Yellow. Plants, 15c each.

Victory. White. Plants, 15c each.

Old Homestead. Pink. Plants, 15c each.

Indian Red. Plants, 15c each.

DELPHINIUM (Hardy Larkspur.) Few flowers are so handsome as the perennial Larkspur, which supplies our gardens with a wealth of blue that would be sadly lacking if it were not for these magnificent plants. No other flower combines so many varied shades of this lovely color, which is always the rarest in the garden. Plants 25c each.

Mixed seed only pkt. 5c.

DIANTHUS or PINKS. A magnificent genius representing some of the most popular flowers in cultivation, producing a great variety of brilliant color and profusion of bloom.

Mixed Colors. Sced pkt. 5c; extra large clumps 25c each.

DIANTHUS BARBATUS (Sweet William.) The varieties we offer are an improvement on the old-fashioned kinds, inasmuch as the colors and size of the flowers are very superior, being grown from select seed. Sweet William looks well in solid beds or masses and requires a good, rich, well fertilized soil to grow them to perfection. Excellent border plants and fine for cutting. Pink, white, red. Plants 15c each.

We have a very fine mixture of seed saved from the above named sorts. Pkt. 5c.

FUNKIA SUBCORDATA GRANDIFLORA (The White Plantain or Day Lily). Pure white, lily-shaped, fragrant flowers. 20c.

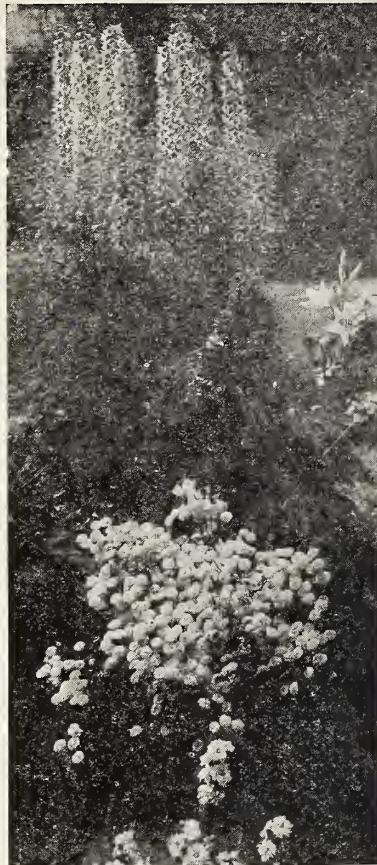
FUNKIA MEDIO VARIEGATA. Green and white foliage with lavender flowers. 15c.

GAILLARDIA GRANDIFLORA (Blanket Flower). The center is dark red-brown, petals marked with rings of brilliant crimson-orange and vermillion. 10c; 3 for 25c.

GYPSOPHILA (Baby's Breath). Graceful for hedges and border work.

Paniculata. 2 ft. July-August. Small flowers on branched stems so thick as to give the plant a lace-like effect. Sced pkt. 5c; plants, 15c each.

HOLLYHOCKS, MAMMOTH DOUBLE-FLOWERING. We offer seven colors. Will bloom the first year. 20c each; 3 for 50c.



Delphinium (Above)
Feverfew (Below)

HEMEROCALLIS FLAVA (The Lemon Lily). This is entirely hardy and bears flowers of a lemon-yellow color. Very desirable. 10c.

HIBISCUS CRIMSON EYE. Belongs to the family of mallows, flowers six inches across; color pure white with pronounced eye of deep crimson. 15c.

PLATTYCODON. The upright Clematis Both blue and white-flowering. 10c.

PYRETHRUM HYBRIDUM. This is the Daisy-flowering Feverfew. 10c each; 3 for 25c.

PLUMBAGO LARPENTAE, or LADY LARPENT. Deep royal-blue flowers. This is an elegant plant. 10c each; 3 for 25c.

RUDBECKIA LACINIATA (Golden Glow). Grows 6 to 8 feet high, bearing hundreds of double yellow blossoms; very desirable. 10c each; 3 for 25c.

STOKESIA CYANEA, or CORNFLOWER ASTER. Grows eighteen to twenty-four inches high, flowers lavender-blue; four to five inches in diameter, borne from June to October. 10c each; 3 for 25c.

Funke Alba



Lathyrus. Latifolius.

Price, 10 cents each; six for 50 cents. The Entire Set of Twenty-eight Distinct Standard Varieties of Hardy Phlox for \$2.10.

Hardy Perennial Phlox

This is one of the most easily grown hardy perennials, and the large number of beautiful varieties now offered make it especially desirable. These noble flowers are not only beautiful as individuals but the cheerful appearance of our gardens during the summer and autumn months is much indebted to them. They succeed in any position or soil, and can be used to advantage either as single specimens in the mixed border or as large clumps or beds on the lawn. To produce the best results, however, they should have a rich, deep and rather moist soil, and let each

STANDARD LIST OF PHLOX

ALCESTE—Deep violet, shading almost to blue.

ATHIS—Deep, clear salmon. Some claim this to be the showiest variety in cultivation.

B. COMTE—Brilliant French purple, with crimson-carmine shadings.

BRIDESMAID—Pure white, clear carmine eye; blooms in large, round heads; attractive.

CONSUL H. FROST—Deep rose color; large white eye.
COQUELICOT—The finest and brightest red of all the Phlox; the

DUGUESCLIN—Rosy-lilac, distinctly rayed with lighter halo.

ESCLARMONDE—Clear rosy-lilac, deeper eye, exquisitely rayed and shaded.

GENERAL VON HEUTZE—Immense trusses of very large flowers; color of the most brilliant salmon-red, with white center; simply grand.

HENRY MARCEL—Dark violet-rose, white eye; distinct.

HENRY MURGER—Enormous pure white flowers, with very large showy, deep carmine center; fine florets and trusses; extra.

HUXLEY—A rich lavender; color fine.
INDEPENDENCE—An excellent white.

INDEPENDENCE—An excellent language, none better.

JULES CAMBON—Clear magenta with large distinct white star in center of each floret; rich and fine.
KOSSUTH—Rich deep purple. Extra fine.
LE MAHRI—Dark violet.

L'ESPÉRANCE. Clear rosy-lilac; large white eye distinctly revealed.

L'ESPÉRANCE—Clear rosy-lilac; large white eye distinctly rayed; large florets; an even bloomer.
LOTHAIR—Clear, even carmine, deep crimson eye.

LUTHAIR—Clear, even carmine, deep crimson eye.
MADAME P. LANGIER—Clear crimson, deeper eye; considered one of the best.
MACULATA—Tall-growing, many-branched, pyramidal trusses of bright reddish almost royal purple; the frost and showiest.

MISS LINGARD—Pearly-white flower, with a very faint pink eye; very remarkable bloomer, producing two to three crops of flow-

very remarkable bloomer, producing two to three crops
ers during the season.

MOZART—Deep carmine center shading to white at edges during the season.

MRS. JENKINS—A grand tall early white for massing.
PANTHEON—Large, clear, deep, bright pink with faint halo; a charming variety.

RICHARD WALLACE—Pure white violet-rose eye; large flowers in immense panicles. Too much cannot be said of this variety.
R. P. STRUTHERS—The very best Phlox grown today. Color clear cherry-red suffused with salmon shades; deep red eye;

yellowish red suffused with salmon shades; deep red eye, fine large truss.



IRIS

GERMANICA

The Irises have generally been overlooked. They are one of the most beautiful and exquisite flowers we have. They are perfectly hardy in our climate and multiply very rapidly.

NOTE—For convenience we will use "S" to indicate standards or upright petals, of the flowers and "F" the falls, or drooping petals.

AGNES. S. White frilled with shaded lilac; F. white traced with lilac at the base or claw. A very beautiful variety. 15c each; postpaid.

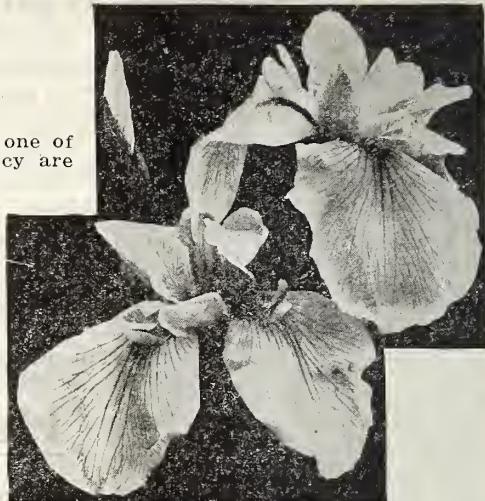
BLACK KNIGHT. A rare and beautiful new Iris. S. intense deep violet blue. F. Velvety purple, exceedingly rich and striking. Very late bloomer, scarce. \$1.00 each; postpaid.

DELMATICA. S. Fine lavender. F. Clear deep lavender. Flowers very large and extra fine. A superb variety for planting in masses and for cut flowers. The true type is scarce. 35c each; postpaid.

HONORABILIS. S. Golden. F. Rich maroon brown and very effective. 15c each; postpaid.

QUEEN OF MAY. A lovely shade of rosy pink, tinted with violet. 15c each; postpaid.

IRIS KAEMPFERI (Japanese Iris). These magnificent iris are among the most beautiful of all our summer flowering plants. The flowers rival orchids some measuring 10 to 12 inches in diameter. Unnamed varieties 12c



Japanese Iris

each; 60c half doz. Very choice named varieties in every color. 25c each; postpaid.

QUEEN EMMA. Pure white, faintly flushed blue, long tapering stem, and very long falls. Possesses a pleasing fragrance. 25c each; postpaid.

Peonies--Hardy Everywhere

"ARISTOCRAT OF FLOWERS"

The wonderful improvement made during recent years in these old-fashioned hardy plants has brought them into renewed popularity. The gorgeous flowers, which rival the finest Roses in size, form and color, are produced in great abundance. After once being planted they require little care and attention, thrive anywhere, and are absolutely hardy even in the coldest climates; each year after planting they grow into greater value, producing more and more flowers. They are not troubled with insect pests. Try some of our fine Peonies, and see what grand flowers they are.

ANEMONEA FLORA RUBRA. Good size, deep brilliant rose, carpels dark crimson; strong grower, tall free bloomer. 50c each; postpaid.

ANDRE LAURIES. Light red, prolific and beautiful. 30c each; postpaid.

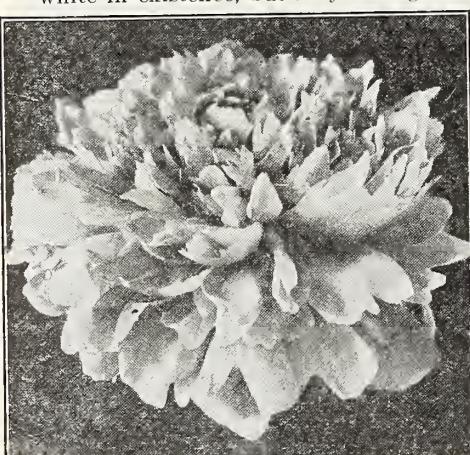
COURONNE D'OR. Large flat semi-rose type; pure white with rings of yellow stamens around the tuft of center petals tipped with carmine; medium tall, strong grower and free bloomer; late; one of the best. 50c each; postpaid.

FESTIVA MAXIMA. This is not only the finest white in existence, but may be regarded as the

queen of all the peonies. A grand cut flower variety, coming in bloom usually for Decoration Day. 50c each; postpaid.

DUCHESSE NEMOURS. Pure white crown with sulphur white color, very fragrant, vigorous grower, very free bloomer. Early, comes a day or two later than Festiva Maxima. Has a high commercial value. 35c each; postpaid.

FELIX CROUSSE. Large globular brilliant red flowers. A strong, vigorous grower of medium height. One of the best varieties. 75c each; postpaid.



LaSubline Peony

GOLDEN HARVEST. A most striking variety, producing large, tri-colored blooms. The guard petals are blush pink with creamy white center. It combines cream, gold, white, pink, salmon, peach and apricot. The total color effect of the flower being creamy-pink; strong, delicate fragrance. 50c each; postpaid.

HUMEII. Immense late cinnamon scented flower of varnished pink. 30c each; postpaid.

LA SUBLIME. A very striking flower of deep, rich crimson color. A sure bloomer. 40c each; postpaid.

MONSIEUR JULES ELIE. Very large, compact, high crown, pale lilac-rose collar shading amber; yellow at the base. Very fragrant. Strong grower, early flowering, extra fine variety. \$1.00 each; postpaid.

MONSIEUR KRELAGE. Large, compact semi-rose type; dark saffron red with silvery tips. Free bloomer. Late. 75c each; postpaid.

PRESIDENT ROOSEVELT. Very large, robust flowering. Dark red; one of the finest of its color. 50c each; postpaid.

PLATYCODON (**Balloon Flower, or Japanese Bell-flower**). They form large clumps and are excellent for planting in permanent borders or among shrubbery. They are also free from attacks of insects, which makes them very desirable hardy garden plants. They should be given a slight protection of leaves or mulch during the winter.

Grandiflorum. 2 to 3 ft. Large, handsome, deep blue flowers. Seed pkt. 5c; plants, 15c each.

Grandiflorum Album. Large pure white flowers, very attractive. Plants, 15c each.

Double Blue and Double White. These two varieties are among the newest acquisitions of the perennial border. Plants, 25c each.

POPPY (**Oriental**). 2 to 3 feet. For gorgeous coloring the Oriental Poppies have few rivals among the hardy plants. The flowers are immense and often measure 6 inches or more across. They are also grand cut in bud state for vases. We offer a fine collection ranging in color from light salmon to dark maroon. Seed pkt. 5c; plants, 25c each.

Iceland Poppy. Mixed seed. Pkt. 5c.

RUDBECKIA (**Corn Flower**). Somewhat resembling the Perennial Sunflower but having a more graceful and refined flower, it is a valuable ornamental, late summer and autumn flowering plant, and very valuable for cutting.

Lacintata. fl. pl. (**Golden Glow**) A well known, popular plant of strong, robust growth, attaining a remarkable height of from 6 to 8 feet and producing masses of double golden yellow cactus dahlia-like flowers from July to September. An effective sort. 15c each; postpaid.

Purpurea. (**Giant Purple Cone Flower**) A most interesting hardy perennial, producing all summer large, showy reddish-purplish flowers about 4 inches across with remarkably large cone-shaped center of brown; thick set with golden tips of spiraling lines. Makes a fine cut flower. Hardy as an oak. 15c each; postpaid.

POLEMONIUM (**Jacob's Ladder**). It takes its name from the regular arrangement of Pinnate leaflets upon the stem. Has large-lobed, bell-shaped flowers of pale blue. Seed pkt. 5c.

PYRETHRUM. One of the most valuable of our summer flowers. It has charming shades of color and wonderful lasting properties as a cut flower. They flower in May and June and frequently in August and September.

Uliginosum Stellatum. 3 to 4 ft. Very large giant daisy-like flowers in great profusion.



Tritoma

The flowers are a glistening white with dark, and most excellent for cutting. Blooming from August to September. Plants 20c each.

Double Mixed. Extra choice double flowering variety. Selected and grown from the finest hybrids. Plants, 25c each.

Roscum Hybridum (Single Mixed.) Crown from a choice strain of seed from the originators of new varieties. Seed pkt. 5c; plants, 20c each.

SWEET WILLIAM (See *Dianthus Barbatus*), page 80.

TRITOMA (**Torch Lily or Red Hot Poker**) A handsome, showy border plant. Flowers borne in compact form on stout 3 to 4 foot stems, having the appearance at a distance of orange and colored spear heads. Requires protection during winter unless in very sheltered position. A good plan is to take up the roots and store them in the basement during the winter. This flower is a rare beauty and will greatly repay you for what little trouble it may cause.

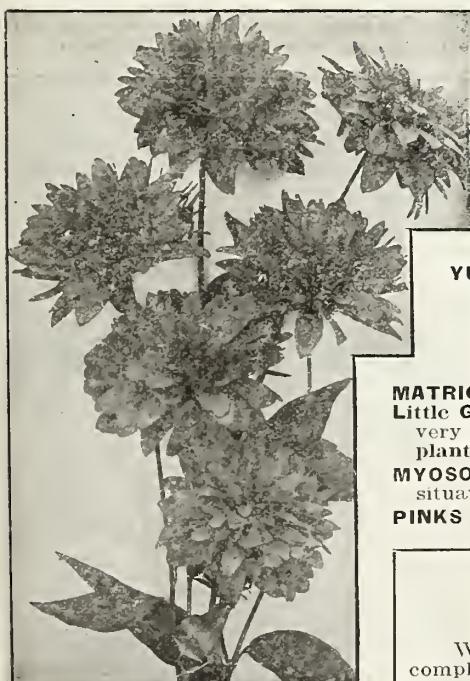
Grandiflora. New Mixed Hybrids. Large plants, 25c each; postpaid.

YUCCA FILAMENTOSA (**Adam's Needle**). Among the hardy ornamental foliage plants this may be classed at the head of the list. Broad, sword-like foliage from 5 to 6 feet tall; branched spikes of large, fragrant, drooping, creamy-white flowers during June and July make it an effective plant for all positions. 25c each; postpaid.

MATRICARIA (**Feverfew**) Little Gem. 1½ to 2 ft. A most useful summer-cutting flower with very double white flowers from June to October. Seed pkt. 5c; plants, 15c each.

MYOSOTIS (**Forget-Me-Not**) It flourishes best in a moist, shady situation. Bright blue. Seed pkt., 5c; plants, 15c each.

PINKS (See *Dianthus*) page 80.

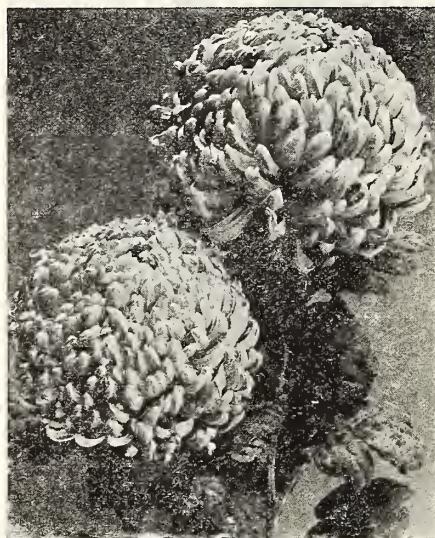


Golden Glow

Bee Supplies

We list Bee Supplies on pages 109-114. We handle a complete line of the A. I. Root supplies.

Bedding and House Plants



Chrysanthemums

CHRYSATHEMUMS

CAN BE SUPPLIED UP TO ABOUT JUNE 1

Of the easiest growth they quickly make large bushes, either in open ground or in pots. We offer the best kinds known. At the low prices offered, every one should have Chrysanthemums. They are the people's flowers.

BLACK HAWK. An extra fine deep, crimson variety of the largest size; none finer of its color. 15c each; postpaid.

GOLDEN LOW. Bright yellow of velvet finish. Flower 5½ inches in diameter. 12c each; postpaid.

GOLDEN WEDDING. Nothing finer among yellows; shines like burnished gold. The standard for measuring yellows; of mammoth size. 15c each; postpaid.

JOHN SHRIMPTON. A rich red that has many admirers; of the largest size. Extra. 15c each; postpaid.

LAVENDER QUEEN. A lovely shade of pinkish lilac. Very desirable. 15c each; postpaid.

PERCY PLUMRIDGE. This grand variety has literally leaped into popularity. Flowers are so large as to startle you. The color shades from a few rows of lavender pearl to the richest pink. 15c each; postpaid.

ROBERT HALLIDAY. Flowers of mammoth size and deep golden yellow; really a wonder. 10c each; postpaid.

TIMOTHY EATON. The largest and grandest of all white mums; simply immense. 10c each; postpaid.

GERANIUMS

12c each except where noted. Any six priced 12c each for 60c; postpaid.

ALPHONSE RICARD. Large, perfectly formed semi-double flowers of bright vermillion-red are freely produced in enormous trusses during the entire season.

BEAUTE POINTEVINE. The color is a beautiful shade of shrimp-pink, delicately shading to a most profuse bloomer the entire season.

HETERANTHE, or DOUBLE GENERAL GRANT. Bright orange-scarlet flowers, profusely produced during the season in good sized trusses. A vigorous grower. Stands the sun well.

JEAN VIAUD. Beautiful shade of mauve-pink, shading to clear white throat; the flowers and trusses are enormous, sometimes measuring 6 inches in diameter. Extra fine.

MRS. E. G. HILL. A profuse bloomer of a soft, light salmon color; each petal bordered with a salmon-rose; will resist the heat of the sun; excellent for bedding. 15c each; postpaid.

MRS. LAWRENCE. One of the finest varieties we have in this color especially as a winter or early spring bloomer, continuing throughout the summer, shade of soft satiny salmon-pink, slightly tinged with white. Extra. 15c each; postpaid.

SWEET-SCENTED GERANIUMS

12c each; 3 for 30c; postpaid

LEMON. The foliage is pronouncedly lemon-scented.

NUTMEG. Foliage has true nutmeg fragrance.

ROSE. The famous sweet rose-scented Geranium; very fragrant.

FLOWERING BEGONIAS

ARGENTEA GUTTATA. A handsome variety, foliage oblong, purplish bronze, marked with silvery gray spots and dashes. Flowers borne in large clusters, and of pure, waxy whiteness. 15c each; postpaid.

GRACILIS LUMINOSA. Magnificent new specimen; exceptionally sturdy and vigorous; unquestionably one of the choicest bedding sorts. Flowers are large, perfect, plentiful and never out of bloom. Color the brightest scarlet. 15c each; postpaid.

SANDERSONII. (Coral Begonia.) Flowers bright scarlet. Almost always in bloom summer and winter. Excellent for vases, etc. 15c each; postpaid.

THURSTONII. Beautiful, stately plant; glossy foliage. Under side of leaves, purplish red; veinings very prominent. Upper side, bronzy green, shaded with crimson and olive, with glossy metallic lustre over all. Flowers beautiful shell-pink. 15c each; postpaid.



Flowering Begonia



Matchless Carnation

COLEUS

GENERAL ASSORTMENT. We have a collection of 30 kinds of the most distinct sorts. Leave the selection of varieties to us, as it is hard to describe the various tints. 10c each; any 4 for 25c; any 12 for 75c; 25 distinct varieties for \$1.50; postpaid.

These are good bedders, standing the hot sun without losing their color. Price of Coleus by the hundred when sent by express, \$3.50, you to pay the expressage.

LEMON

AMERICAN WONDER OR PONDEROSA. It is a cross between the ordinary lemon and grapefruit, or Pomelo, of rapid growth; large dark green foliage, and bears fruit when quite young often weighing 3 to 5 lbs. Very ornamental on account of large shiny foliage and wonderful immense fruit borne very freely. The fruit is edible and may be used for all culinary purposes. 20c each; postpaid.

OTAHEITE ORANGE

CHINESE DWARF. A grand pot plant of great beauty and novelty. Is a dwarf orange that grows, blooms and fruits freely in pots, even when only a foot or two high. Fruit is about half the size of ordinary orange; is sweet and luscious. Blooms are produced in greatest abundance are delicate and beautiful in color, and rich in delicious perfume. Blooms most freely during winter, although very likely to bloom at all times of the year. With 1 or 2 plants you can raise an abundance of fragrant blossoms. 20c each; one Lemon and one Orange for 35c; postpaid.

TENDER VINES AND CLIMBERS

THE WONDERFUL GIANT MOONFLOWER. (*Ipomea Maxima*.) A giant in growth and flower, and wonderfully fragrant. This grand new Moonflower is a decided improvement over the old well-known variety, *Ipomea Grandiflora*. The flowers are more than twice the size, oftentimes measuring from 6 to 7½ inches across. Its growth is very rapid when planted in good rich soil. Fine plants, 15c each.

GERMAN or PARLOR IVY. A rapid-growing plant, well adapted for training in the parlor. Leaves glossy green and flowers yellow, in clusters. 10c each.

SMILAX. A lovely house vine. 10c each.

TRADESCANTIA. (Wandering Jew.) Fine for baskets. Two distinct kinds. 10c each.

VINCA MAJOR VARIEGATA. Fine for baskets and vases; green and white foliage. 10c each; large strong plants, 25c each.

MONTHLY CARNATIONS

"THE DIVINE FLOWER"

Price, except Nebraska, 12c each; any 3 of your selection for 30c.

BENORA—The ground color is the faintest blush, lightly penciled in soft pink. The bloom is fluffy in appearance, exquisitely beautiful in form. One of the grandest of all Carnations.

CHAMPION—By far the darkest Carnation ever seen, at the same time the most abundant bloomer, Dark red, shaded with richest maroon, fringed petals, nearly all flowers being on a long stem. Surpasses in richness of color the most perfect Jacqueminot Rose.

GOOD CHEER—One of the most fragrant Carnations we have seen. Color a clear, bright, glowing scarlet; a most continuous bloomer and distinct in color from any other sort offered. Greatly admired by all who have seen it growing here.

HERALD—One of the grandest of all Carnations for the garden, a dazzling red that nothing surpasses.

MATCHLESS—Largest flowers of the purest immaculate white; large sized blooms. Valuable for garden

planting and for pot culture. Very sweetly scented with delightful clove fragrance.

SENSATION—Certainly a grand pink Carnation of the largest size and deliciously scented.

NEBRASKA—This flower has caused a sensation among Carnation growers. It is the best red Carnation in existence. Monster flowers of the best and most lasting shade of beautiful, bright, crimson-scarlet. Every flower is perfect. Is the finest bloomer of any of the Carnations. Price 25c each; 3 for 65c; postpaid.

FUCHSIAS

"LADIES' EARDROPS"

Price, 15c each; the set of 4 for 50c

BLACK PRINCE. This is, without question, the very finest Fuchsia grown for the amateur to cultivate. It makes a shapely bush, is robust in growth, free from disease and insects, and is probably the freest in blooming. We have seen specimen plants 6 feet in height and 4 feet across loaded with bright buds and blossoms of a beautiful waxy carmine or pink color.

ENFANT PRODIGY. A grand Fuchsia; bright red sepals, deep purple corolla.

MONTROSA. Of the largest size; scarlet sepals, double snow-white corolla.

SPECIOSA. Habit erect and compact, presenting a decidedly neat and attractive appearance as a pot plant. The fine star-shaped flowers are produced in profusion, and begin when plants are quite young. The flowers are three inches or more in length; tube and sepals bright rose, corolla brilliant carmine; it blooms quite freely.



American Wonder Lemon
Also called Ponderosa

FERNS

OSTRICH PLUME FERN (*Nephrolepsis Whitmanii*). Thrives perfectly in the warm atmosphere of living rooms. Combines graceful pluminess and charm with additional features of good shape, size and growth. The accompanying illustration was made from a photograph and gives only a fair idea of its graceful appearance. 20c each; postpaid.

BOSTON SWORD FERN (*Nephrolepsis Bostoniensis*). This Fern has proven to be a most popular decorative plant. It is a rapid grower of very easy culture, soon forming a large graceful plant; its beautiful fronds often attaining a length of 4 to 5 feet which arch and droop so gracefully that it is sometimes called the Fountain Fern. No plant ever introduced has had a larger sale than the popular "Boston Fern." You can make no mistake in ordering this magnificent Fern, as it is sure to please you. 20c each; postpaid.

THE ROOSEVELT FERN (*Nephrolepis Roosevelti*)

In general characteristics it resembles the world-famous Boston Fern but it produces many more fronds than the Boston thus making a bushier, handsomer plant in a 6-inch pot than any other Fern in a 10-inch pot. The pinnae are beautifully undulated giving the Roosevelt a pronounced wavy effect seen in no other Fern; as the plant ages this effect becomes quite distinct. 20c each; postpaid.

TEDDY JUNIOR. The fern for every household. It is a sport from the now famous Roosevelt Fern, and while its habits of growth is to produce a shorter frond it retains all the valuable characteristics of the parent plant. The fronds are broad and beautifully tapered from base to

tip. The pinnae are distinctly undulated, a compact, vigorous grower, thrives under most adverse conditions; makes rapid growth and produces a plant of rare beauty in the average dwelling without special care. 20c each, postpaid.



Ostrich Plume Fern

ASPARAGUS PLUMOSA (Climbing Lace Fern.)

Easily grown and very satisfactory for window and house culture; an extremely graceful window climber, bright green feathery foliage, as fine as the finest silk or lace. The fronds retain their freshness for weeks when cut and are greatly admired for floral decorations. An exceedingly beautiful plant for house and conservatory, and will thrive nicely in the temperature of an ordinary living room. 20c each; postpaid.



Asparagus Plumosus Nanus

FISH TAIL FERN (*Nephrolepis Davalliodoides Furcans*)

This is a grand fern entirely distinct from any of the other varieties of *Nephrolepis*. The ends of the Pinnae are so formed as to resemble a fish tail giving the fronds a crested appearance, very effective. It grows into the most shapely plant of any of the *Nephrolepis*. Grand for house culture. 20c; postpaid.

BABY'S BREATH FERN. (*Nephrolepis Goodii*).

This has the finest foliage of all the ferns. It is so delicate and dainty in texture that baby's breath will set its fluffy foliage in motion. The fronds are very fine and filmy on which account it has been called by some the lace fern. Nothing is daintier or more exquisite than well grown specimens in any size. No fern in existence can compare with "Baby's Breath" in fluffiness. 25c each; postpaid.

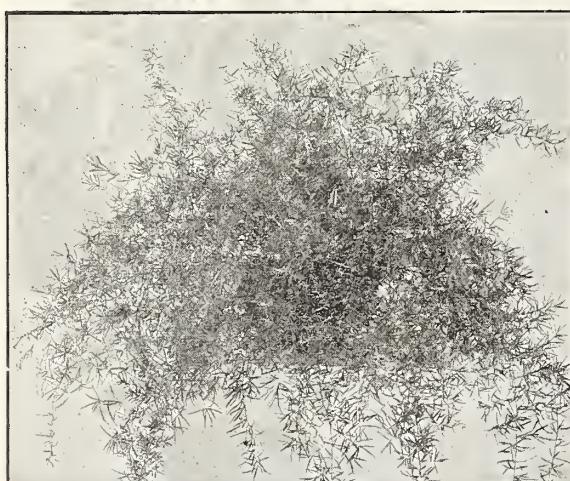
ASPARAGUS SPRINGERII (Emerald Feather Asparagus.)

It is especially valuable for pots, vases, baskets, etc., covering all with its beautiful sprays of lovely green feathery foliage, which can be cut freely and are very useful for bouquets, wreaths, and all kinds of floral decorations. It is a strong, vigorous plant, very easily grown, requires but little care and keeps on growing, fresh and green, year after year. 20c each; postpaid.

DWARF FERNS FOR FERN DISHES.

We have selected a few of the hardiest and most satisfactory varieties for filling fern dishes of which there is no prettier table decorations. 15c each or 7 different dwarf ferns for 75c; postpaid.

LARGE SIZE PLANTS OF ALL ABOVE FERNS,
50c EACH, BY EXPRESS.



Asparagus Springerii



Angel's Trumpet
VIOLETS ¹⁰ CENTS
EACH

PRINCESS OF WALES. This variety is the best of the Single Violets. A true violet-blue; fine for cutting.

LADY HUMES CAMPBELL. One of the best of the double purple violets.

SWANLEY WHITE. Double white flowers in great profusion.

Dwarf Lantanas

Price, 10 cents each; the seven for 60c

ALBA PERFECTA Pure white.

COUNTESSE DE BIEN COURT. Clear bright pink

VERSICOLOR. Crimson fine.

HARKETT'S PERFECTION.

Variegated foliage; cream and pink flowers.

JAUNE d'OR. Cream and orange.

LEO DEX. Rich red.

M. SCHMIDT. Orange scarlet.

WEEPING LANTANA

A Weeping Plant of Great Beauty—one of the grandest basket plants grown. Price, 10 cents each.

Peperomia Muscosa or Watermelon Begonia

A most beautiful plant for pot culture, easy to grow, and thrives anywhere; leaves deep olive-green, marked with silvery-white. Thick and waxy-like; leaves variegated white and green. Price, 10 cents.

Cyclamen Persicum Giganteum OR PERSIAN VIOLET

This is a decided improvement over the old variety, being of a more robust habit and stronger grower. Produces flowers on short, stout stems and of immense size. A charming winter bloomer. 10c each.

LEOPARD PLANT

A decidedly striking and effective plant. Also known as the Leopard Geranium. Fine for house culture; easy to grow. Also fine out of doors, hardy as far north as Tennessee. The leaves are ten to twelve inches across and are distinctly marked with creamy white and yellow spots. Price, 20 cents.

This page consists of New and Unique Plants for both outdoor and indoor planting. They are not hardy.

OLEANDERS

These shrubs are becoming immensely popular again. We are growing and selling them by thousands. No plant makes more handsome specimens in tubs for the veranda or yards. Can be wintered in the cellar. We have four colors.

LUTEA. Has double primrose-yellow flowers of a lovely shade, also fragrant. Scarce. 15 cents each.

ROSEA. Has double pink flowers. The old favorite. Very sweet. 15 cents each.

LILIAN HENDERSON. Has double white flowers for largest size. Fragrance like the old double pink. Scarce. 15c each.

VARIEGATA. Has variegated foliage; green, broadly edged with creamy yellow. Double pink flower. 15c each.

THE FOUR DIFFERENT COLORS FOR 50 CENTS

BRUGMANSIA OR ANGEL'S TRUMPET

It grows easily, blooms freely indoors in winter and in the garden in summer. Has large, tropical leaves, with blooms eight inches long by six inches wide at the mouth, resembling a trumpet. Pure white in color and as fragrant as a Jasmine. Blooming plants, 25 cents each.

PANSY GERANIUM, MRS. LAYAL

This new and wonderful Pansy Geranium is of the easiest growth, dwarf in habit, and literally covered with flowers all the time; and as it requires little or no attention, is invaluable as a window plant. The coloring and marking of the flowers are most extraordinary—light pink, white, dark purple, black, etc., almost rivalling the Pansy in uniqueness of flower. Strong plants, ready to bloom, 20c each; 3 for 50 cents.

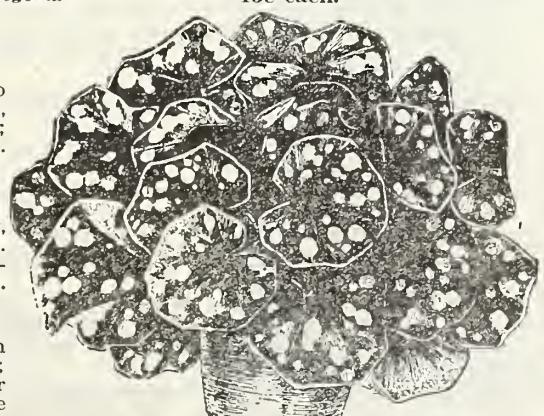
Sansevieria Zeylanica

ZEBRA PLANT

A beautiful plant adapted for decoration of drawing rooms and halls. Leaves are beautifully striped crosswise with broad white variegations on a green ground. Can be placed in any position in any room and do well. Is useful both in winter and summer. Grows splendidly out of doors during summer. Fine plants, 15c each.



Watermelon Begonia



Leopard Plant

Summer Flowering Bulbs



Canna

FIREBIRD. This is by all means the best red flowered, green leaved canna today. The flowers are borne in immense trusses on strong stalks well above the leaves. They are a splendid form, round and shapely. The petals measure and sometimes exceed 2½ inches across, and the color is a clear, glistening scarlet, without any streaks, spots or blotches. We have tested out a great many varieties and have never found a canna its equal. It ranks with or even above King Humbert. We will have a fine stock of these from three inch pots ready May 1st. 35¢ each; 3 for \$1.00; \$3.50 per doz.

DAVID HARUM—Bronze foliage, bright vermillion-scarlet, mottled with deep red, and with crinkly-edged petals. 3½ feet.

DAHLIAS

Large, symmetrical double flowers having broad petals, incurving at the center. Blooms from August to freezing weather.

FRANK L. BASSETT—Color bright royal purple, shading to lavender-blue, an extremely early and profuse bloomer.

GOLDEN WEDDING—A giant flower. A deep golden-yellow, the same as found in the Golden Wedding Chrysanthemum. A gorgeous variety for the garden or for cut flowers. 25 cents.

HORTULANUS FIET—(New.) Salmon-pink, yellowish center; as large as Souv. de G. Doazon. Has taken many first prizes. 50 cents.

JACK ROSE. In color it resembles the Jacqueline rose. Profuse bloomer and splendid for cutting purposes.

SYLVIA. A beautiful deep pink, shading lighter to the center.

A. D. LIVONI. Rich pink, finely formed; a very handsome flower.

ARABELLA. Very large and beautiful. Color soft primrose shaded with rose.

QUEEN VICTORIA. Large, rich golden yellow.

RED HUSSAR. Richest cardinal red, with long stems. Splendid for cutting.

MIXED DAHLIAS. Including some of the above varieties, 15¢ each; per dozen, \$1.50; postpaid.

DAHLIA SEED. Single or double. Pkt., 5¢; postpaid.

Price of all Dahlias, except where noted, 20¢ each; \$2.00 per doz.; postpaid. By express \$1.75 per dozen.

Plant in deep, rich soil, when the ground becomes warm. For earliest flowering the tender bulbs may be started in the house. For succession of bloom, plant up to June 1st. After fall frost, lift the bulbs, let them dry, and then removing the tops, store in a cool, dry place, away from frost, planting early in the spring.

CANNA

The most popular decorative plant of the day. The earth should be spaded deeply and well enriched. After planting water sparingly until the plants have taken root and show good leaf growth. When in full foliage they may be watered freely. We are making a specialty of Cannas and you will find our plants extra fine and the blooms of very beautiful coloring.

ALLEMANIA—Grand color yellow, heavily dotted and overlaid with blood-orange. 5 feet.

FREDERICK BENARY—Immense flowers; currant-red, bordered yellow, and pronounced orange throat. 5 feet.

INDIANA—Glistening golden-orange, lightened by flecks of old gold and daintily flecked and penciled with deep rose. Single blossoms often seven inches across. 5½ feet.

FLORENCE VAUGHAN. Pure yellow dotted with red. 5 ft.

KING HUMBERT. Giant flowered; orange scarlet; bronze leaf. 4 feet.

PENNSYLVANIA—Intense vermillion-scarlet or pure red. The flowers are immense, often seven inches across. 5½ feet.

UNCLE SAM—The most stately of all Cannas; bears three or four enormous bunches of brilliant orange-scarlet flowers on each stalk. Received an award of merit from the Royal Horticultural Society of England. 6 feet.

PRICES ON ALL CANNAS EXCEPT FIREBIRD

Dormant Roots, 8¢ each; 75¢ per doz.; postpaid. By express, per dozen, 65¢; per 100, \$5.00.

Started Plants ready May 10th, 10¢ each; per dozen, \$1.00 postpaid. By express, per dozen, 85¢; per 100, \$6.50.



Dahlia

Summer Flowering Bulbs—Cont.

GLADIOLI

This is one of the best summer-flowering bulbs. It is a flower anyone can grow and is lovely enough to satisfy the most exacting. The flowering season may be continued by planting from the middle of April to the first of June. Set the bulbs 6 inches apart, and 2 to 4 inches deep. For fall treatment see under "Summer Flowering Bulbs," page 88.

AUGUSTA. Lovely pure white, blue anthers. 5c each; 40c dozen; postpaid.

AMERICA. The finest pink Gladiolus yet introduced; especially valuable to florists, spikes 2 to 3 feet long; flowers are large, open and spreading. Color delicate lavender pink. 5c each; 40c dozen; postpaid.

BARON HULOT. Dark purplish violet. 5c each; 50c per dozen.

BRENCHLEYENSIS. Intense fiery scarlet. 5c each; 40c per dozen; postpaid.

MRS. FRANCES KING. Bright "Flamingo" pink; strikingly attractive. Flowers 4 to 5 inches across are borne on stalks 5 feet high. 5c each; 50c per dozen; postpaid.

SCARDALE or PINK BEAUTY. A beautiful deep pink variety, very early. One of the best. 5c each; 50c per dozen; postpaid.

NIAGARA. The best yellow. 10c each; \$1.00 per dozen; postpaid.

GROFF'S HYBRIDS. The size and beautiful shadings of this strain give the greatest possible range of varieties. 5c each; 40c per dozen postpaid.

GRISWOLD'S FINE MIXED. All colors and varieties. Every one a beauty. 4c each; 35c per dozen; postpaid.

GOOD MIXED. Especially recommended to make a good brilliant show in the garden for a small outlay. All bloomers. 3c each; 4 for 10c; 25c per dozen; postpaid. 50 for 75c; 100 for \$1.25; by express at buyer's expense.



Gladioli

AIR POTATOES. A brand new climbing vine of recent introduction. It has large heart-shaped leaves; they are so glossy that they look as if varnished and grow at a rapid rate. They produce a quantity of round tubers all up the vine from the size of birds' eggs to a goose egg. It belongs to the same family as the old cinnamon vine, but is much more handsome and greatly superior to it in every way. The tubers can be stored over the winter like potatoes, and planted in the spring. 15c each; 3 for 40c; postpaid.

CALADIUM ESCULENTUM (Elephant's Ear). Fine tropical plant, bearing immense leaves. Start as directed for cannae, when growing you cannot make the soil too rich or keep it too wet. 15c each; 2 for 25c; postpaid.

CRINUM AMERICANUM. A native of the swamps of Alabama and Florida, but it grows in any good garden soil and is of easy culture. Handle like an Amaryllis, and the beautiful clusters of large, pure white, delicately sweet scented flowers will repay for the care. 20c each; 3 for 50c; postpaid.

KUDZU VINE (Jack-and-the-Bean-Stalk.) A most remarkable hardy climber. Starts slow but in a few weeks grows almost beyond belief. Foliage dark green. Fine for porches and arbors. Roots, small, 13c each; 3 for 40c; postpaid. Large roots, 25c each; by express.

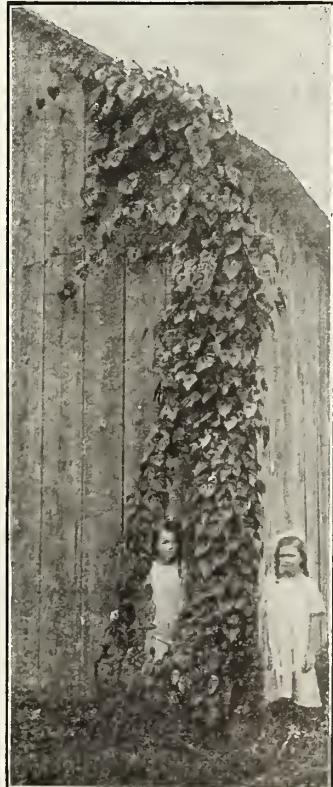
MADERIA VINE. A rapid climber, twining to great heights. Thick, glossy leaves and feathery, very fragrant flowers. It grows anywhere, but does better in a warm, sunny location. It is also very pretty for training in the house. Strong tubers, 5c each; 3 for 10c; per dozen, 30c; postpaid.

MATRIMONY VINE. Well known, hardy, fast growing vine; handsome when covered with scarlet fruit in Autumn. Plants 35c each; postpaid.

OXALIS. Summer-blooming. A very pretty plant for edging flower beds. Bears an abundance of pink and white flowers and delicate foliage. 15c per dozen; postpaid.

TUBEROSE. A beautiful white wax-like very sweet-scented double flower growing on tall stems. 5c each; 40c per dozen postpaid.

Mexican Ever-blooming Tuberose. These come from the high table-lands of central Mexico. They have tall stiff stems, flowers pure white; single, delicately fragrant. They withstand all kinds of wind and weather except hard frosts, commence to bloom in May and are a mass of white till cut down by frost.



Air Potatoes



Tigrinum

LILY OF THE VALLEY. Bearing slender stems set with tiny white bells, delightfully fragrant, do well in shady situations. Flower each season without any attention. 6c each; 3 for 15c; 40c per dozen; postpaid.

SPECIOSUM RUBRUM. White, beautifully spotted with red; very fragrant; flowers in August. This is one of the most useful lilies; perfectly hardy and flowering well under all conditions. 20c each; postpaid.

SPECIOSUM ALBUM. Same as the above but pure white. 25c each; postpaid.

SUPERBUM. Flowers bright orange-red, thickly spotted with purple. Remarkable for immense height (often 8 feet) and profusion of bloom; a strong plant, bearing from 20 to 30 flowers. Blooms in July. 15c each; postpaid.

TENUIFOLIUM. Vivid scarlet with reflexed petals. Very easy culture. 15c each; postpaid.

TIGRINUM SPLENDENS. The well known "Tiger Lily," grows from 4 to 5 feet high and bears an immense number of bright orange flowers spotted with black. Blooms in August. 10c each; postpaid.

TIGRINUM. fl. pl. A variety of the Tiger Lily with double flowers. 15c each; postpaid.

WALLACEI. Flowers rich, clear buff, spotted black, late bloomer. 15c each; postpaid.

ALWAYS PROVE SATISFACTORY

Sheridan Co., Nebraska. Mar. 24, 1916.

Dear Sirs:-

Received my seeds today, am well pleased with them all. Have bought plants and seeds from you every year and they always prove satisfactory.

Yours very truly,

MRS. J. H. DONOHOE.

Hardy Lilies

With the exception of Lily Candidum, which seems to prefer an open position, most lilies thrive best when planted in a semi-shaded position where the ground can be kept cool and moist by the protection of shrubs and a carpet of lawn grass. Planted among shallow-rooting perennials they find a congenial setting both as to soil and shelter. The bulbs should be planted from 6 to 8 inches deep with a little sand or moss under the base of each bulb. Candidum Superbum and Tigrinum we can supply early from home-grown stock. The varieties coming from Japan we can seldom supply until the end of November, but can ship immediately upon their arrival here.

LILUM CANADENSE. Wild yellow lily. Flowers vary in color—red and yellow. Grows 2 to 5 feet high, and is a most hardy species. Nice to plant among shrubbery and does quite well in shade. June and July. 15c each; \$1.50 doz.; postpaid.

LILUM LONGIFLORUM. Pure white, trumpet-shaped, flowers in June or July, very hardy. Can also be grown as a pot plant. Bulbs 25c each; \$2.50 doz.; postpaid.

LILUM SPECIOSUM MELPOMENE. Words cannot describe the beauty of this variety. Frosted white, spotted, clouded, and bordered with pinkish crimson. Petals deeply recurved and widely bordered. 35c each; \$3.50 doz.; postpaid.

LILUM SPECIOSUM MAGNIFICUM. Rich Crimson. The finest colored of all Speciosums. 25c each; \$2.50 doz.; postpaid.

AURATUM. (Gold Banded Lily.) Very large, white spotted crimson with broad yellow bands. 20c each; postpaid.

CANDIDUM. One of the best hardy lilies. Flowers pure white, large and of delightful fragrance. Blooms in June. 15c each; postpaid.

ELEGANS. Perfectly hardy and will succeed in most any position. Flowers large and showy, bright red, flushed orange. 1½ feet high. Blooms in June and July. 15c each; postpaid.



Lily of the Valley

HEDYCHIUM (Butterfly Lily). Grows best on low, damp ground. Are much like Cannas, but the leaves are narrower and the flowers are produced from a close head. Blooms about 4 o'clock in the afternoon. The pure white flowers look much like butterflies and are very fragrant. If kept in the house in a growing state it blooms continually. 15c each; 3 for 40c; postpaid.

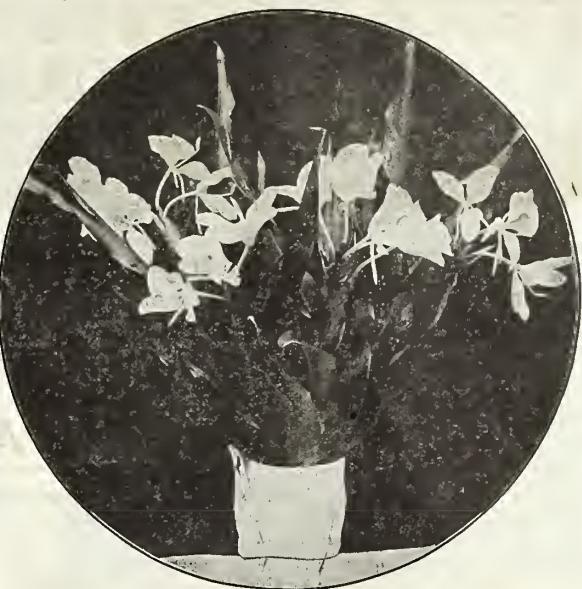
TRINIDAD DASHEEN. The Trinidad Dasheen belongs to the same family as the well known Elephant Ear or Calladium Esculentum so often grown all over the country for ornamental use in our gardens and somewhat resemble them but grow more upright, leaf is rounder and of a much darker green in color. They like an abundance of water and will thrive where it is too dry for the common Elephant Ear. They will on good rich soil reach a height of 6 feet and upwards; and if planted 2x4 feet, will yield enormous crops. The shoots in early spring are often cooked like asparagus and make an excellent substitute for that vegetable. The tubers are much richer in food values than either Irish or Sweet Potatoes and are cooked in various ways. A bulletin containing a variety of recipes for cooking them has been issued by the Agricultural Department at Washington that can be had for the asking. They mature such a wonderful crop of tubers that it is thought they will prove a very profitable crop. At any rate everyone should try a few. Price, small size, 10c each; large size, 20c each; postpaid. By express, small size, \$6.00 per 100; large size, \$15.00 per 100.



Trinidad Dasheen

FALL BULBS

In September of each year we import from Holland a large shipment of Fall Bulbs. These should be planted any time from the middle of September until the ground freezes. This list includes bulbs for outdoor planting and for planting in the house. Write for our illustrated Bulb Catalog.

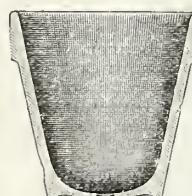


Butterfly Lily

XANTHOSOMA (Bataviensis). The Xanthosomas are similar to Caladiums, having great arrow-shaped leaves. This variety has very dark purple stems and dark green leaves and is one of the best ornamentals we know of. Fine for either garden or home culture, where one has room enough for a magnificent plant. 20c each; 3 for 50c; postpaid.

STANDARD FLOWER POTS AND SAUCERS

Send by Express or Freight
We pack these carefully, but will not be responsible for breakage in transit.

**FLOWER POTS**

	Weight	Each	Doz.	100
2 in. 1½ lbs. per doz.	\$0.02	.12	.80	
3 in. 5 lbs. per doz.....	.03	.20	1.25	
4 in. 1 lb. each.....	.04	.35	1.85	
5 in. 2 lbs. each.....	.05	.50	3.65	
6 in. 3 lbs. each .....	.06	.65	5.00	
7 in. 4 lbs. each.....	.10	1.10	7.50	
8 in. 5½ lbs. each.....	.15	1.50	10.00	
9 in. ....	.20	2.00		

STANDARD SAUCERS

	Each	Doz.	100
3 in. ....	.02	.20	\$1.25
4 in. ....	.03	.25	1.75
5 in. ....	.04	.35	2.00
6 in. ....	.05	.50	3.00
7 in. ....	.06	.60	4.00
8 in. ....	.07	.70	5.50
9 in. ....	.10	1.05	7.50
10 in. ....	.15	1.50	10.00
12 in. ....	.25	2.40	18.00



Sheridan County, Mont. October 20, 1917.
Gentlemen:

My rose bushes did so well this year. One of them bloomed all summer. The first ones I have had in 16 years. Thanking you, I am,

MRS. J. WM. ATOR.



Our nursery stock is all inspected by the State Entomologist and must be free from all insects and diseases before it can be sold. A certificate to this effect accompanies each shipment. We guarantee our trees to give you satisfaction in so far that if they are not satisfactory upon arrival you can return them immediately at our expense.

The Apple

The Apple is the first fruit, both in importance and general culture. No fruit is more in demand, more universally liked or more generally used. The earlier varieties ripen about the last of June, and the later sorts can be kept until that season. It is a fruit in perfection the entire year. Make a judicious selection of varieties, and a constant succession can be had the whole year. We catalog only such varieties as are productive and suitable for this climate.

FOR PRICES OF APPLE TREES LISTED ON THIS PAGE, SEE PAGE 94

JONATHAN

A delicious dessert apple. Fruit good size, surface rich golden yellow; flesh yellow; flavor rich and spicy, slightly acid. Specially good for early winter. Season November to January.

BEN DAVIS

Old variety, large, red stripes; good keeper; quality medium.

OLDENBURG (Duchess.)

Fruit large striped; beautiful, quite juicy, mild sub-acid, or almost tart; tree a good bearer, with upright head, requiring little or no pruning; very hardy. Indispensable north and west, good south, and a favorite east. One of the best for culinary use, being particularly well adapted for cooking and drying. July and August.

DELICIOUS

Originated at Peru, Madison county, Iowa. Fruit medium to large, oblong and of the sheep-nose type. Color light green, shaded, splashed and mottled with light and dark crimson. Quality of the best for dessert. Keeps good. December to April.

WEALTHY

Originated by the late Peter M. Gidion. A vigorous, spreading grower, very productive and hardy. Fruit above medium to large, oblate, very regular, smooth, light, yellow, almost wholly covered with bright red splashes and stripes. A beautiful fruit. Flesh white, often stained with red, tender, very juicy, slightly sub-acid, very good for table use and cooking. A splendid and profitable market sort. Season October to February.

WINESAP

A valuable, well-known variety. One of the leading export apples, fruit medium, roundish, skin moderately thick and tough. Dark red with yellow; flesh very rich and firm. Season December to May.

NORTHWESTERN GREENING

Tree a splendid vigorous grower, quite hardy. Fruit large to very large, green becoming yellow-green when ripe. Flesh yellow, fine grained and firm. Flavor a good sub-acid, very smooth and attractive. Very prolific and a regular bearer.

RED JUNE

Size medium, oblong, very red. Flesh white, tender, juicy, sweet, acid with a fine flavor. Quite early and keeps well for a summer apple. Tree very hardy, bearing young and abundantly.

GRIME'S GOLDEN

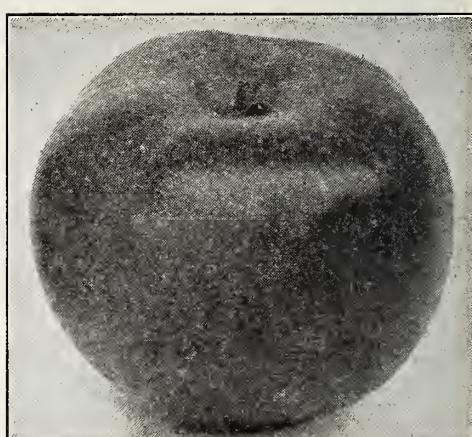
Tree vigorous. Fruit above medium, regular, surface rich golden yellow; flesh yellow, flavor rich and spicy, slightly acid. Specially good for early winter. Season November to January.

MAIDEN BLUSH

Good size, fine flower, beautifully blushed, good bearer, a fine apple for home and market. September.

YELLOW TRANSPARENT

One of the earliest apples. Fruit is medium large, smooth, transparent. Skin is clear white, turning pale yellow when ripe. Flesh white, fine grained, aromatic, and of splendid quality. Tree is vigorous, good bearer. Two-year-old trees frequently produce fruit. Succeeds in all Eastern states, and should be planted in all cold climates. Succeeds well on thin soils. Ripens in early August. Its hardiness, vigor and early bearing commend it.

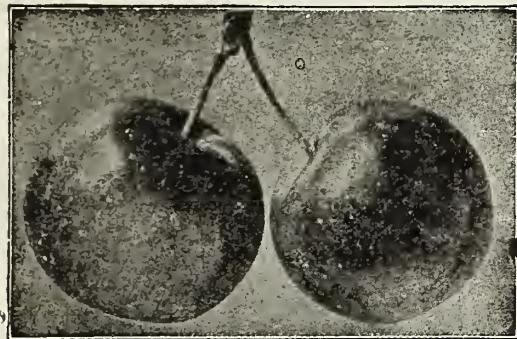


Wealthy

Crab Apples

WHITNEY NO. 20. (Hybrid.)

A beautiful, upright growing tree. A young and abundant annual bearer and very hardy. Fruit of large size, conical, yellow striped with red, and covered with a whitish bloom. Flesh, white, crisp, sub-acid, almost sweet and very fine for eating; good for sweet pickles. Season August to September.



Florence

FLORENCE.

A hardy tree, bearing young; fruit medium, of carmine color; flesh yellowish; medium fine; a fine jelly crab.

MARTHA.

A vigorous grower and free from blight. Fruit large yellow with heavy blush of light red, flesh fine grained, firm; very juicy and fine for cooking.

Pears

CLAPP'S FAVORITE

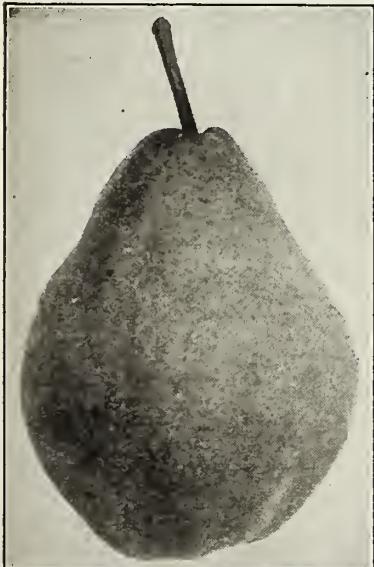
A large, fine pear, resembling the Bartlett but without its musky flavor. Pale lemon yellow with brown dots, very juicy with a delicate flavor.

FLEMISH.

Large, red cheeked, beautiful, excellent quality, productive; one of the hardiest; very popular in the West.

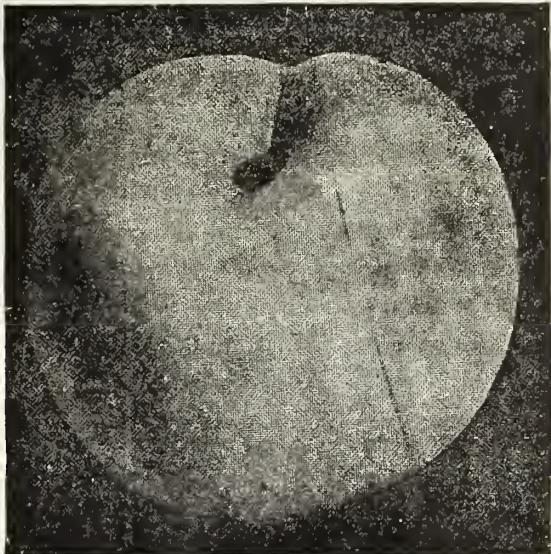
SECKEL.

Small, rich, yellowish brown. One of the best and highest flavored pears known. Very productive.



Clapp's Favorite

Peaches



Hale's Early

ALEXANDER EARLY. (Cling.)

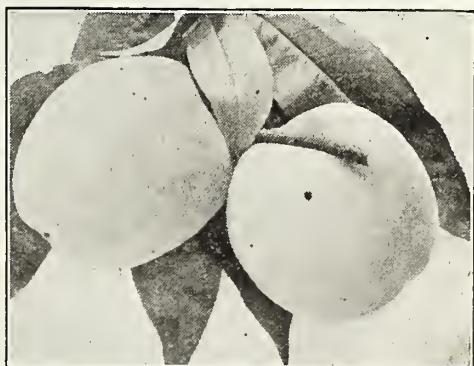
Medium size, greenish white, nearly covered with rich red; flesh sweet and juicy. Very productive.

HALE'S EARLY. (Semi-Cling.)

Medium greenish white with red cheek; flesh white, melting, juicy. Abundant bearer.

CHAMPION.

Originated in Illinois; fruit is large, beautiful in appearance; flavor delicious, sweet, rich and juicy; skin is creamy white, with red cheek, becoming quite red when ripe. Freestone; season last of August. Tree vigorous. One of the very hardest and best varieties for Nebraska.



Alexis Apricot

Apricots

ALEXIS (Russian.)

Medium to large, light orange, yellow flecked with red; flesh tender, juicy, sweet and good quality; hardy; very productive. July.

BUDD. (Russian.)

Medium to large, light orange with blush on sunny side; flesh sweet, juicy with flavor of the peach; hardy and productive. August.

For Prices of Fruit on this Page, see Page 94



✓ EARLY RICHMOND

(English Pie Cherry.) A well-known old standard variety. Tree is hardy, healthy, a free grower, very productive and regular in bearing. Fruit clear bright red, of medium size, acid, rich and one of the best for canning and for pies. The most popular of the true Kentish Cherries. Ripens in June.

ENGLISH MORELLO.

Medium to large roundish, dark red, nearly black when ripe, flesh purplish red. Meaty, juicy, productive.

MONTMORENCY.

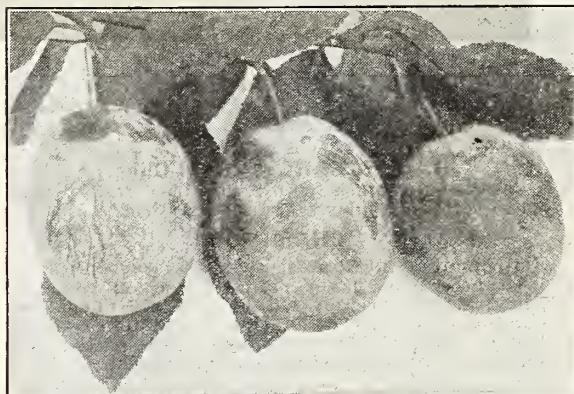
A beautiful large, red cherry larger and finer than Early Richmond, but fully 10 days later. Being extraordinary prolific and very hardy, it can be highly recommended. Valuable for canning and preserving. One of the best and most popular varieties.



Early Richmond

✓ COMPASS CHERRY

Absolutely hardy everywhere. Nearly an inch in diameter, bright red, sweet and juicy and of very fine flavor. The original tree bore fruit the third year from the seed and has borne a full crop every year since. The tree is a regular and heavy bearer and produces fruit the next year after setting out. For exposed situations and for the North and West it is the "Cherry." Requires no protection whatever; in every particular is hardy as an oak.



Burbank

PLUMS

HAWKEYE

One of the largest and best plums grown in the northwest. Fruit large round, oval, thick skin that bears handling; color dull red over yellow; flesh yellow and of prime quality. Tree hardy and vigorous, bears young and reported everywhere as prolific and regular. A profitable market plum, stands shipping well. Highly valued for fresh fruit and culinary purposes.

WOLF

One of the most popular and widely planted of all our hardy plums. A very rapid grower which comes into bearing when young and is very productive. Fruit large, round to oval; color crimson over orange; free-stone. Flesh yellow, of good flavor and quality. Season August 25th to September 1st.

BURBANK

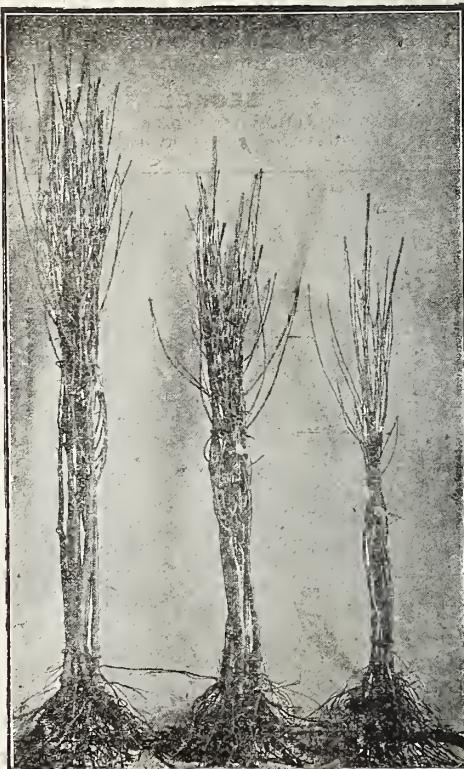
Medium to large orange-yellow; dotted with red, flesh meaty, yellow, sweet and good; valuable for canning, hardy and very prolific.

WEAVER

Large oblong, flattened at ends, dark mottled red with purplish bloom; flesh firm, meaty and very good; a constant and regular bearer and very hardy.

OUR FRUIT TREE PRICES

By Express at Purchaser's Expense				
	Size	Per 1	Per 10	Per 100
Apples	.5-6 ft.	\$0.40	\$3.75	\$35.00
	4-5 ft.	.30	2.75	25.00
Crab Apples	.5-6 ft.	.50	4.75	45.00
	4-5 ft.	.40	3.75	35.00
Apricots	.5-6 ft.	.50	4.75	45.00
Cherries, selected	.5-6 ft.	.65	6.25	60.00
Compass Cherry	.4-5 ft.	.60	5.75	55.00
Peaches	.5-6 ft.	.40	3.75	35.00
Pears	.5-6 ft.	.50	4.75	45.00
Plums	.5-6 ft.	.60	5.75	55.00



6 7 ft.

5-6 ft.

4-5 ft.

SMALL FRUITS

Pocklington



✓ **CONCORD**
(Black.) The old, well-known and deservedly popular variety, succeeds wherever grapes can be grown. 10c each; \$2.00 doz. postpaid. By express \$1.50 doz. \$8.00 per 100.

MOORE'S EARLY

(Black.) Bunch not quite as large as Concord, berries larger and very much like it in flavor and quality. Vine a moderate grower, very healthy and hardy. Produces a fair and with high cultivation, a heavy crop. Ripens so early as to be nearly out of market before Concord is ripe, and is therefore, a very popular early market variety. Succeeds best on rich soil. 20c each; \$2.50 dozen; postpaid. By express \$2.00 dozen; per 100, \$12.00.

NIAGARA. (White.)

One of the leading white sorts; bunch large, shouldered, compact; berry large, yellowish white, juicy, vinous and sprightly, quality good; skin tough. Price same as Moore's Early.

POCKLINGTON. (Green.)

Pale green, usually with tinge of golden yellow where exposed to the sun; bunch large, very compact, very large; flesh juicy, sweet, with considerable pulp. Vine a moderately good grower, but very healthy and very hard, it buds notwithstanding severe cold even better than Concord. It produces a heavy crop of fine showy clusters. Price same as Moore's Early.

WORDEN. (Black.)

Bunch large, sometimes shouldered, compact; berries very large, skin thin. Ripens 5 to 10 days earlier and fully equals Concord in vigor and productiveness. Price same as Agawam.

Grapes

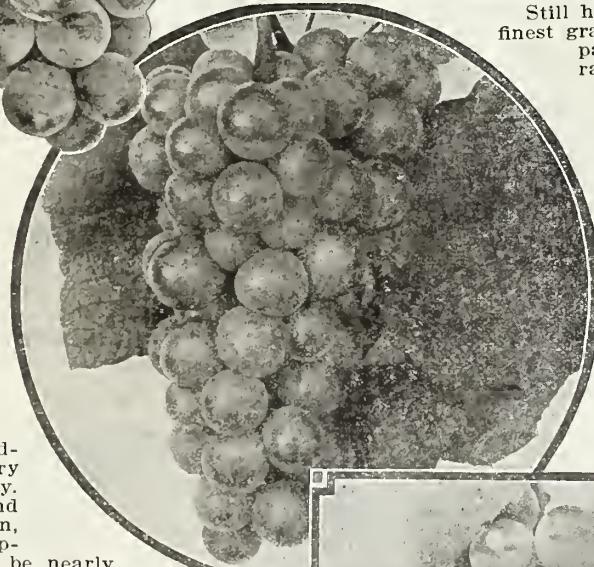
There is scarcely a yard so small, either in country or city, that room for one to a dozen or more grape vines cannot be found. They do admirably trained up to the side of any building or along the garden fences, occupying but little room and furnishing an abundance of the healthiest of fruit. Make the soil mellow, and plant the vines somewhat deeper than they stood in the nursery. Plant about 8 feet apart by the fence or building. For vineyards, make rows 8 feet apart, 5 to 10 feet in rows.

✓ AGAWAN. (Red.)

Bunch large, compact, shouldered, berry large, dark red or nearly black; flesh tender, juicy, vinous and good quality; later than Concord. 20c each; \$2.50 per dozen; postpaid. By express, \$2.00 per dozen; \$12.00 per 100.

✓ DELAWARE (Red)

Still holds its own as one of the finest grapes; bunches small, compact, shouldered; berries rather small, round; skin thin, flesh very juicy, without any hard pulp; an exceedingly sweet, spicy and delicious flavor; vines moderately vigorous; very productive; should be covered in winter. 30c each; 2 yrs. old, \$3.00 doz.; postpaid.



We are agents
for Myers Spray
Pumps. The
world's best. See
page 102.



Agawan



Houghton Gooseberries



Wilder Currant

There is no embargo on our Gooseberry Bushes. They are all guaranteed to be grown west of the Missouri River, hence, we are at liberty to ship East or West.

Gooseberries

Plant in good rich soil in rows 5 feet apart by 3 feet in the row, and give a liberal dressing of manure every season. Regular pruning every year is essential for the production of fine fruit. The English varieties especially do best in partial shade and should be heavily mulched.

✓ DOWNING.

An old and well-known variety. Fruit large and handsome, pale green, of fine quality. A strong, vigorous grower, seldom affected by mildew. One of the best. 20c each; postpaid. By express, \$2.50 per dozen.

HOUGHTON.

Fruit small to medium, pale red, of fine flavor. Plants of slender, spreading growth and enormously productive. 20c each; postpaid. By express, \$2.00 per dozen.

Currants

Hardy, easily cultivated, stand neglect well, and liberally responds to cultivation and generous treatment; indispensable for jellies, etc. Set four feet apart in rich ground; cultivate well or mulch heavily; prune out old wood so that each remaining shoot will have room to grow. If the currant worm appears dust with hellebore. All plants well rooted and strong.

CHERRY

Berries sometimes more than half an inch in diameter, bunches short, vigorous and productive when grown on good soils and well cultivated.

✓ FAY'S PROLIFIC

The leading market variety; bunches and berries large and uniform in size, easily picked; exceedingly productive.

VICTORIA

Large, bright red; berries medium size, of excellent quality. Erect grower, very productive. Ripens late, a valuable sort.

✓ WHITE GRAPE

Very large, yellowish white, sweet or very mild acid. Excellent quality and valuable for the table. Productive.

WILDER

One of the strongest and most productive. Bunch and berries very large, bright, attractive red color, even when dead ripe; hangs on bushes in fine condition for handling until very late. A valuable market sort.

PRICES: All currants 20c each; postpaid. \$1.75 per dozen. By express,



White Grape Currants



Rasp- berries

It is difficult to transplant one year plants. Two year plants transplant easily and are cheapest in the end.

Plant on strong soil, manure freely, cultivate well, and mulch heavily. Moisture must be retained in order to grow raspberries successfully.

Red Raspberries *Loudon*

The hardiest and most productive of red varieties, very large and of the best quality.

CARDINAL

This wonderful berry surpasses all by its great growth, extreme hardiness, exceeding productivity and the unusual richness of its pure flavored, large, purple berries.

BLACK RASPBERRIES *CUMBERLAND*

Largest black raspberry known. Perfectly hardy and vigorous grower. For productivity nothing exceeds it. In quality rich, sweet and luscious, a mid-season variety.

KANSAS

Strong, vigorous, standing extremes of drought and cold, and bearing immense crops. Early berries, jet black and of best quality.

Prices on all Raspberries except Everbearing:
1 yr. old plants \$1.00 per doz.; \$6.00 per 100.
2 yr. old plants \$1.50 per doz.; \$8.00 per 100.

EVERBEARING RED RASPBERRIES

ST. REGIS

Plants set early in April gave berries June 20th of the same year, and the canes continued to produce ripe berries freely, until the middle of October. In addition to the bright crimson color and large size of the fruit, it is so firm and rich in sugar that it will stand shipping 200 miles, can readily be kept in perfect condition for several days after being gathered. It succeeds upon all soils whether light and sandy or cold and heavy clay, and the canes are absolutely hardy. Price, \$1.50 per doz.; \$8.00 per 100.

Every Tree and Shrub We Sell Must Make Good or We Will.

Blackberries

Plant in rich soil and a little shade, among trees, or on north side of trees or fence, if possible.

Of all the varieties tested, the Snyder has proven the hardiest and Stone's Hardy second.

STONE

It is a vigorous grower; berry glossy black and of good flavor; a little later than Snyder. 75c doz.; \$4.00 per 100.

SNYDER

Medium size, sweet and good, strong grower, productive, extremely hardy; fully proven its value. After all the experience we have had with blackberries we are thoroughly convinced that this is the berry for the West and Northwest. Should be universally planted. Price 75c doz.; \$4.00 per 100.

BLOWER

A splendid new sort. Large size, jet black good shipper, best quality, unexcelled productivity. 15c each; 6 for 80c; postpaid. By express 75c per doz.; \$4.00 per 100.

FOR
PRUNING
SHEARS

See Page 117



291196014

Strawberries

The Strawberry has been styled the queen of fruits. It is the first to ripen and the quickest to come into bearing. Can be successfully grown on a great variety of soils; responds readily to kindly location and liberal feeding and culture. Every home builder who fails to have an abundance of this delicious health-giving fruit, misses a chance of great things for little money. The strawberry prefers a cool, moist soil. Not subject to severe drouth; good upland soil is the best, well enriched. Spring planting is best.

Of the hundreds of varieties that have been introduced we offer only a small number of the best, all of which will thrive under any ordinary care.



Our Sturdy Plants

WARFIELD

(P.) This variety stands next to the Senator Dunlap, being quite similar in shape and size. However, Warfield is a sour berry and a little deeper in color, thus making it one of the very best for canning. It also holds its color in the cans, which is a very strong point in its favor. While the individual plants are quite small, it is remarkable the number of quarts produced by a lightly matted row on good, strong soil. 35c doz.; postpaid. \$1.50 per 100 by express.

EVERBEARING STRAWBERRIES

Strawberries that yielded fruit continually from May until frost have been known for a long time. The new cultivated sorts were originated by cross-pollinating these wild everbearing Alpine sorts with our standard varieties and combining the everbearing habits of the one parent and the size and quality of the other.

We have been testing the different varieties of everbearers for several years on our own grounds and offer to our patrons the best.

PROGRESSIVE

This berry is one of the best for home use. It is a good-sized, smooth, red berry. Plants are strong, vigorous and very prolific. Fruits all season with a heavy late season yield. Price, 60c per doz.; postpaid. \$3.00 per 100; by express.

SENATOR DUNLAP

(B.) Plant resembles Warfield, rampant runner, should be restricted in its production of plants; fully equal to Crescent and Warfield in its ability to succeed under all circumstances. Fruit good size, regular form, beautiful bright red, glossy, firm, splendid, excellent quality, one of the best for canning; ripens early and continues a long time. Price, per doz. 35c; postpaid. \$1.50 per 100 by express.

BEDERWOOD

(B.) This is generally considered to be one of the very best early varieties for home use or market. It is a splendid grower, making a large number of strong runners. It has a perfect blossom and is exceptionally productive. The fruit is of good size, light red, medium firmness and good quality. One of the best to plant with Warfield. Price, 35c per doz.; postpaid. \$1.50 per 100 by express.

BRANDYWINE

(B.) This variety has proven so satisfactory with all who have grown it that it is consequently in large demand. It is comparatively new and of great value by reason of its productiveness, large size, beauty and good quality, which renders it especially desirable for the home garden. The berries are a glossy crimson, very handsome, firm, solid and excellent in quality with a fine flavor. The plant is remarkably vigorous, hardy and exceedingly productive. It is a mid-season to late variety and is excellent to plant with Warfield. 35c per doz.; postpaid. By express, \$1.50 per 100; \$10.00 per 1,000.

EARLY OZARK

(B.) A very promising strawberry from Missouri. A cross between the popular Aroma and Excelsior. The large berries are almost round and bright red in color. Is a grand grower with healthy, large, dark green foliage, and exceedingly prolific. This variety has been tested here for several seasons and proven very satisfactory. Excellent shipper. 35c per doz.; postpaid. By express, \$1.50 per 100; \$10.00 per 1,000.



Progressive



Beautiful Lawns

A rich velvety lawn with a background of Beautiful Ornamental Shrubs enhances the value of a home and gives to it the natural artistic setting that we so much admire. We can furnish all Ornamental Shrubs, Vines and other plants to make your home as beautiful as the above.

TO MAKE A GOOD LAWN. Nothing is more easily made and kept in order by a little well directed care. To get grass seed up quickly and evenly the surface must be mellow and level with at least six inches of good black soil. Sow one pound of Griswold Special Lawn Mixture to every 400 square feet and rake the seed in and roll well, or use a wide board until soil is uniformly firm. If the soil is clayey, cover the surface with a light coating of our **Lawn Fertilizer**. To keep the lawn beautiful, it must be frequently mowed. In hot, dry weather it is better to mow the lawn and not remove the clippings, as these will gradually form a thin mulch which will hold moisture, and protect the roots from the hot sun. Never water a lawn when the sun is shining brightly upon it. The best time for watering is late in the afternoon or evening.

Lawn Seed

LINCOLN BRAND LAWN GRASS MIXTURE

A mixture adapted to our hot, dry climate. It is composed of Blue Grass, White Clover, and several other best lawn grasses. Some of these come early, some grow best during the summer, some grow well in the shade while others make their growth in the fall. In this way one has green grass the whole season. This mixture will make a rich, deep green, velvety lawn, with a close, thick turf, in a few weeks' time, and one that will last much better than if sodded. One pound covers 400 square feet (a space 20x20 feet) for new lawns, and half this amount for re-seeding

old ones. Per lb. 60c; 5 lbs. \$2.50; postpaid. By freight, 1 lb. 50c; 5 lbs. \$2.25.

FANCY KENTUCKY BLUE GRASS

Best grade of fancy, clean, new crop tested seed. Per lb. 40c; 5 lbs. \$1.75; postpaid. By freight, 1 lb. 35c; 5 lbs. \$1.50; 10 lbs. \$2.85.

WHITE CLOVER

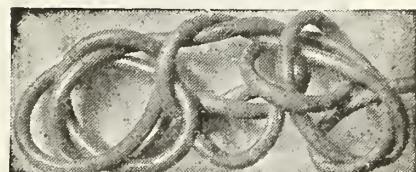
This is just the seed to sow on the bare spots in your yard or lawn where a very quick green covering is desired as it will cover better in ten days' time than grass seed will cover in two months. 85c per lb.; postpaid. By express or freight, 75c per lb.; 5 lbs. \$3.50; 10 lbs. \$6.50.

FULLY GUARANTEED LAWN HOSE

Testoide Non-Kinkable Hose

Light—Strong—Flexible

An indestructible moulded hose for Lawn, Greenhouse, Stable, Garage. Of braided construction; cannot unwrap, kink or burst. Made in continuous lengths up to 500 feet, which gives you any length you want and avoid leaky couplings. Price, $\frac{1}{2}$ -inch size, per ft. 15c; $\frac{3}{4}$ -inch size, per ft. 17c.



REGULAR GUARANTEED HOSE

Will be replaced if not satisfactory

$\frac{1}{2}$ -in. Griswold's Lincoln Brand, 50 ft.....	\$5.25	$\frac{3}{4}$ -in. Griswold's Jasonoide, 50 ft.....	\$4.75
$\frac{3}{4}$ -in. Griswold's Lincoln Brand, 50 ft.....	5.75	Hose Gaskets (rubber washers) doz.....	10c pd.
$\frac{1}{2}$ -in. Griswold's Jasonoide, 50 ft.....	4.00	Braided Hose (indestructible).....	18c per ft.

ALL KINDS OF LAWN FERTILIZER LISTED ON PAGE 127

JUSTRITE NOZZLE

Regular Hose Nozzles. Price, 60c. Postpaid, 65c; not postpaid, 60c.

Lawn Supplies



THE "FROG" SPRINKLER

The Frog Sprinkler is a novelty which we have just added to our line. It is a one-piece iron sprinkler. It throws a generous, finely distributed spray and, having no loose parts, it cannot get out of order.

The Frog is painted green with gilded eyes and is attractive on any lawn.

It stands 4½ inches high on a sled allowing it to be dragged over the ground without tipping over. Price, \$1.10 postpaid. .95c not postpaid.



THE "FOUNTAIN" LAWN SPRINKLER

One of the Really Good things. Made entirely of brass. No moving parts. Nothing to get out of order. More beautiful than a fountain; more efficient than a shower. Price, postpaid \$1.10; not postpaid, 95c.

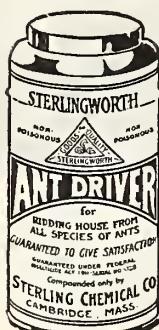


WOODEN HOSE MENDERS

½-inch and ¾-inch only.
Price, per dozen, ½-inch.....30c
Postpaid.
Price, per dozen, ¾-inch.....35c
Postpaid.

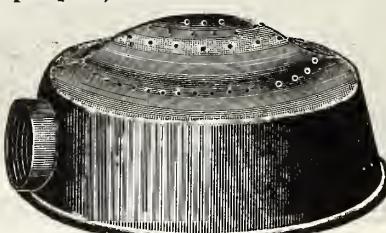
ANT DRIVER

This is effective against most of the known species, especially the small red and black ant, which are the most troublesome in this country. Price, postpaid, 35c; not postpaid 25c.



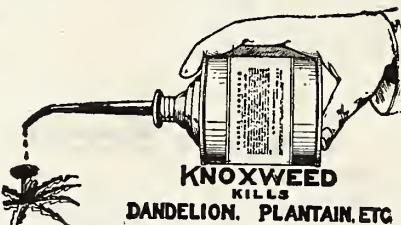
BUSY

As the name implies, is always busy. Top, galvanized iron, base steel. Price, postpaid, \$1.10; not postpaid, 95c.



PERFECTION

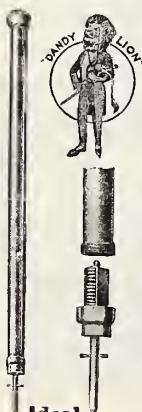
As gentle and even as the rain drops. Top made of brass; bottom heavy galvanized iron. Price, postpaid, 80c; not postpaid 65c.



KNOXWEED KILLS DANDELION, PLANTAIN, ETC

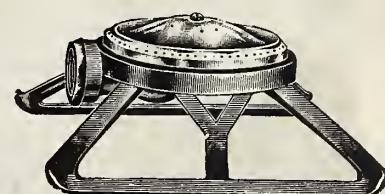
KNOXWEED

Kills dandelions, thistles, plantain, and other noxious weeds, that are annoying on lawns or farms. Easy to use and is thorough. Kills all weeds that it comes in contact with. Price, small can, postpaid, 60c; not postpaid, 50c; large can postpaid, \$1.60; not postpaid, \$1.50.



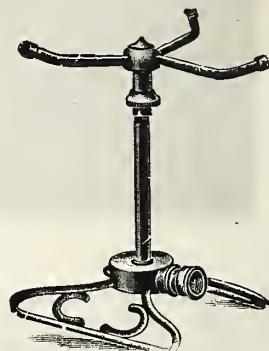
THE IDEAL DANDELION KILLER

This new Dandelion Killer is a tube 1 inch in diameter and 38 inches long. It has a screw cap at the bottom for filling and a valve which lets out about one teaspoonful of liquid to each plant. Simply fill the tube with gasoline and you can kill the dandelions as fast as you can walk around over the lawn. Price, postpaid, \$1.25; not postpaid, \$1.10.



TUXEDO

A universal favorite. Top brass; base steel. Price, postpaid, \$1.00; not postpaid 85c.



ANACONDA

One of the best Lawn Sprinklers. Arms can be adjusted to throw the water any distance desired. Price, postpaid, \$1.40; not postpaid, \$1.25.



GALVANIZED STEEL HOSE CLAMPS

Galvanized Steel Hose Clamps are made of heavy sheet steel, and galvanized by a superior process which effectually prevents rust within a reasonable length of time.

They are strong and serviceable and have lugs which engage the vise jaws, making it an easy matter to tighten the clamp onto the hose. Price 5c each; 50c dozen; postpaid.

Sprayers

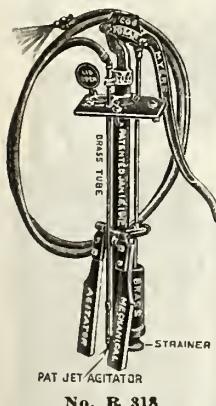
IMPROVED BARREL SPRAY PUMP



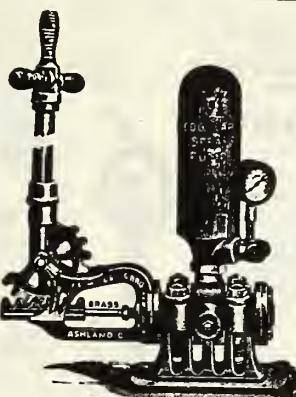
No. 305B. This pump is made in a first-class manner. All parts that come in contact with the liquid are of heavy brass. It can be easily and solidly bolted to any barrel. The air being compressed into the air chamber with a 2-inch all brass cylinder makes the spray continuous. A mechanical agitator and small jet of liquid from the pump keeps the ingredients thoroughly agitated. It sprays whitewash, kalsomine, water, paints and any other liquid. Fitted with 15 feet of best 5-ply rubber hose, and graduated Vermorel nozzle complete as cut (except barrel). Price \$13.75.

COG GEAR BARREL SPRAY PUMP

No. R-318 has bronze ball valve and brass seats. The plunger is brass fitted with hemp packing. Will handle hot, cold or any caustic mixture. The cylinder discharge pipes are all brass. The air chamber is 32 inches in length, enabling the pipe to throw a uniform, constant elastic spray. It has good leverage, is very powerful and is easily operated. The malleable iron base fits an 8x8 inch hole. Price without hose or nozzle or barrel, \$11.00. Fitted with one lead of 15 ft. hose with graduating vermorel nozzle, \$14.75.

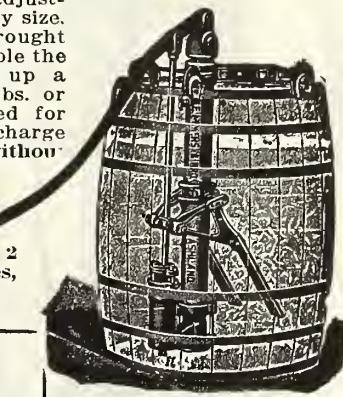


No. R-318



No. R-309

No. R-316-B. This is a pump same as No. R-309 with 50-gal. bbl. mounted on skids with pressure guage. One 15-foot lead of $\frac{1}{2}$ inch 7-ply discharge hose, 1 Fembro Nozzle, one 8-foot pipe extension with lever shut-off, and mechanical agitator. Special features of this outfit are Cog Gear Movement, Increased Leverage, Device for spraying under heavy pressure. Mounted complete, occupying smallest space. Capacity sufficient for eight nozzles. Well adapted for spraying potatoes or other vegetables in rows. Price, complete, \$42.00.



No. 307 O. K.

FOR SPRAY MATERIALS See Page 104

MYER'S DUPLEX BACK GEARED DOUBLE ACTING SPRAY PUMP

No. R-309. This is built especially for heavy spray work. The 2-inch cylinder is brass lined. The plunger is brass, hemp-packed, and piston rod is brass. You can use any material, hot or cold. It is fitted with large air chamber pressure guage, 6-foot bound suction hose, two 8-foot extension pipes, and two Vermorel or Bordeaux nozzles. Can be used on floor or barrel as the motion of handle is either perpendicular or horizontal. Price, \$26.00. 30 feet of heavy hose for \$7.50 extra.



No. R-320

EXTENSION PIPES

8-foot Iron Extension Pipe	.65	10-foot Bamboo Extension Pipe with cutoff..	4.00
8-foot Bamboo Extension Pipe, with cut off....	\$3.75	12-foot Bamboo Extension Pipe with cut-off..	5.00

A SPECIAL PIPE to fit Nos. 27, 329, 307, and for Myer's Knapsack, for spraying under leaves of Musk Melons or Cucumber Vines, 50c each.

SPRAYERS SHIPPED BY FREIGHT OR EXPRESS AT YOUR EXPENSE

Sprayers—Continued



PERFECTION SPRAYER

Built on the best lines, of high grade material and with the idea of turning out a sprayer which has none of the faults and defects so common in many Knapsack sprayers. The hose is attached to the sprayer at an angle so that it will not kink and become cracked and broken. The shoulder strap is attached with snaps and can be quickly and easily removed. The hose is $\frac{3}{4}$ -inch 5-ply cloth inserted and is equipped with our automatic shut-off nozzle. This sprayer will handle Whitewash, Water, Paints, Bordeaux Mixtures, etc., perfectly. These sprayers are made in galvanized steel or brass as ordered. All sprayers tested to 60 pounds before leaving factory.

Galvanized Steel..... \$5.50
All Brass..... \$8.25

SPRAYER AND PAINT MACHINE



No. 329. Sprays whitewash, cold water, paints or any liquid. Galvanized tank holds 7 gallons. Pump is made of brass with brass ball valves and malleable handle. It has a patent double agitator and is a most complete and serviceable outfit.

Price \$11.50

NURSERY STOCK

See pages 67 to 98

MYER'S KNAPSACK SPRAY PUMP



No. 330. The tank holds 5 gallons. The pump has a large air chamber, ball valves, solid plunger and agitator. It is so arranged that no water can drip on the operator. The pump can be removed easily. The pump is also fitted with handle, so the operator can set the knapsack on the ground and work as a bucket pump. The handle lever can be shifted from right to left shoulder at will. Price, \$10.50.

SPRAY YOUR TREES

WRITE FOR COMPLETE SPRAY CATALOG OF SPRAYERS, SPRAY MIXTURES AND SPRAYING CALENDAR.

SPRAYERS SHIPPED BY FREIGHT OR EXPRESS AT YOUR EXPENSE

NO. 31 IDEAL SPRAYER



IDEAL SPRAYER OUTFIT

The original wheelbarrow spraying outfit. One of the most popular "one man" machines made.

The Ideal is well designed and built for durability and convenience of operation.

As light as possible and still allow ample strength in the completed machine.

All working parts coming in contact with the liquid are made of brass.

We have this sprayer in two styles, No. 31 with air pressure tank, as shown in cut, and No. 30 without the tank. In using No. 31 you can pump up a pressure of 150 lbs. and the machine will operate about 5 minutes without further pumping. Price No. 31, \$28.00; No. 30, \$18.75.

LITTLE GIANT

No. 327 $\frac{1}{2}$. A Brass Spray Pump, complete with agitator, hose, fine and coarse spray and solid steam nozzle, with malleable foot rest. Will throw a stream 50 feet. This is a first class all around sprayer, 28 inches high, made of $1\frac{1}{2}$ -inch brass tubing.

Price \$4.50

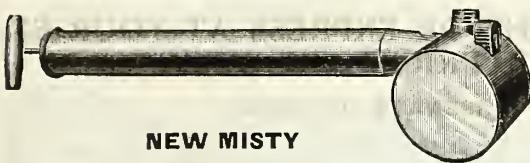


KANT KLOG

The sprayer holds over 4 gallons. The air pump is made of heavy brass 2 inches in diameter. A safety valve is provided. Special attention is called to the new "Kant Klog." The first and only nozzle ever made which gives both flat and round sprays or solid sprays. A light pressure of the thumb starts the spray instantly. Price, Galvanized Steel and 3 feet brass extension rod, \$6.25; Polished Brass and 3 feet brass extension rod, \$9.60.

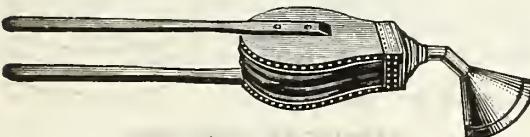


Sprayers—Continued



NEW MISTY

Made of heavy tin; has the same size air chamber as our other styles, and the reservoir holds about one quart, and throws a single spray straight ahead. Price, postpaid 60c; by express 50c.



ACME POWDER GUN

Sprays powdered insecticides. It weights 1½ pounds. Price, by express, \$1.25.



For use in applying dry insect powder. Price, 50c; postpaid. 45c by express.



SLUG SHOT

Just dust it lightly on the plants. It kills potato bugs, cabbage worms, melon, squash and cucumber bugs. Non-poisonous and harmless to all creatures except insect life. Price, 1 lb. can, postpaid 25c; not postpaid 20c; 5 lbs. not postpaid 45c; 10 lbs. 80c.



THE "EASY" SPRAYER

This sprayer holds one gallon of liquid, is equipped with automatic shut-off lever nozzle, and made of heavy galvanized iron. Just as good as the larger sprayers only for size. Price, by express.....\$1.90

Kills Certain Mildews and Blights on Flowers or Fruits, Roses, Chrysanthemums, Violets, Grapes, Gooseberries, Musk Melon, Onion Smut, Rust Mite on the Cabbage, Rust or Mildew on Parsley and on any plant. Grape Dust is a practical, economical and usually effectual remedy. The application is to be made by dusting the diseased portions of the plant. Apply Grape Dust at the first appearance of trouble, so that some portion of this powder shall reach each minute spore. Apply with bellows, raising a cloud of dust, on a warm, dry day, if possible. It is sold in 1 lb. cartons, 5 and 10 lb. packages. Price, 1 lb. can with perforated top, 25c postpaid; not postpaid, 1 lb. 20c; 5 lbs. 65c; 10 lbs. \$1.15.

SPRAYERS SHIPPED BY FREIGHT OR EXPRESS AT YOUR EXPENSE

No. 20. Tank consists of a Mason fruit jar. Its shape causes it to give a churning motion when in use thus keeping the ingredients thoroughly mixed. Price, by express, 75c.



NO. 202 MIDGET JUNIOR



A small, well made sprayer for household use. Will handle all kinds of liquids perfectly. The pointed nose of the pump passing through the tank makes it a very strong sprayer. Price, 35c; postpaid. By express, 30c.

THE ACRE-AN-HOUR SIFTER

is ideal for applying BUG DEATH and other dry insecticides. Price, by express, 75c.

TOBACCO DUST

One of the best remedies for green and black aphids, fleas, beetles, etc., also for insects in the ground. Price, 1 lb. postpaid 20c; not postpaid, 1 lb. 10c; 5 lbs. 35c; 10 lbs. 60c; 50 lbs. \$2.50; 100 lbs. \$4.50.



BUG DEATH

This is a powder used for killing any bug or worm that eats the foliage or flowers of any plant. It is absolutely harmless to plant or animal life, thus making it a safe poison. Can be used dry or with water. For best satisfaction should be used when the tender shoots first come. Price, 1 lb. package, post-

paid 20c, not postpaid 18c; 3 lb. pkg., not postpaid, 45c; 5 lb. pkg. 60c; 12½ lb. pkg. \$1.25; 100 lb. keg \$8.50. Reg. U. S. Pat. Off.



HAMMOND'S GRAPE DUST

Spray Mixtures and Insecticides

ALL OF THESE GOODS BY FREIGHT OR EXPRESS AT YOUR EXPENSE UNLESS POSTPAID PRICES ARE GIVEN

LIME-SULHUR SOLUTION



Use one gallon to make twelve gallons of liquid for strongest use, or 24 gallons for summer spraying. For San Jose Scale spray every part of the trunk and branches after leaves are off in the fall and the tree is dormant, using one part to ten of water. Then again in the spring before the leaf buds open. Better make two sprayings of it if you can, about two weeks apart. Price, qt. 45c; $\frac{1}{2}$ gal. 80c; gal. \$1.10; 5 gal. \$3.25. Ask for price in larger lots.

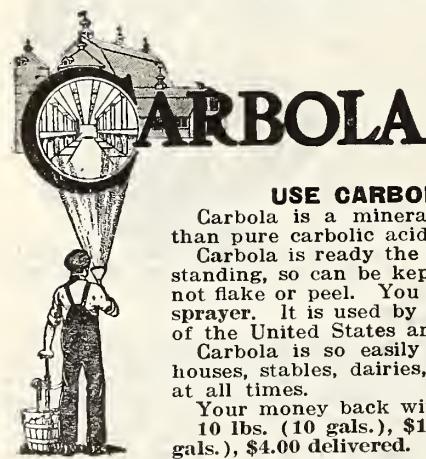
BORDEAUX MIXTURE POWDER

Add 45 gallons of water to each 10 lbs. of Bordeaux Mixture and spray all fruit trees before buds are open and again after the fruit has set. Potatoes will yield twice as much if sprayed with this mixture and Paris green or Arsenate of Lead. Price, 1 lb. 35c; 5 lb. jars \$1.25 each; 10 lbs. \$2.40; 25 lbs. steel cans \$5.00; freight or express.



BLACK LEAF 40

is a concentrated solution of nicotine sulphate and is guaranteed to contain 40% of nicotine by weight. It is one of the best contact poisons, being highly recommended by experiment stations and by spraying experts. Owing to its large dilution it will not stain. "Black Leaf 40" cannot be sent by parcel post. Price, 1 oz. bottle 25c; $\frac{1}{2}$ lb. 75c; 2 lbs. \$2.50; 10 lbs. \$10.75.



USE CARBOLA, THE GERM-PAINT, INSTEAD OF WHITEWASH

Carbola is a mineral pigment combined with a germicide twenty times stronger than pure carbolic acid, but it is absolutely non-poisonous and non-caustic.

Carbola is ready the minute you mix it with cold or hot water. It does not spoil by standing, so can be kept on hand for use when convenient or on a rainy day. It does not flake or peel. You can supply it with a brush or sprayer. Carbola never clogs the sprayer. It is used by thousands of poultrymen, dairymen and farmers in all sections of the United States and by many experiment stations and agricultural colleges.

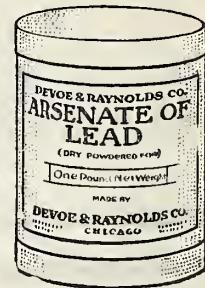
Carbola is so easily prepared and applied that you can easily keep your poultry houses, stables, dairies, cellars, etc., thoroughly sanitary and attractive in appearance at all times.

Your money back without an argument if it is not what we claim.

10 lbs. (10 gals.), \$1.00 and postage; 20 lbs. (20 gals.), \$2.00 delivered; 50 lbs. (50 gals.), \$4.00 delivered. Trial package (covers 250 sq. feet) and booklet for 25c postpaid.

ARSENATE OF LEAD

Arsenate of Lead is more sticky than any other insecticide, and is used where it is desirable that the poison should remain on the foliage. It positively will not burn. Use two pounds of Arsenate of Lead to 50 gallons of water. We sell only the best. Price, 1 lb. 40c; 2 lbs. 70c; 5 lbs. \$1.75; 12 $\frac{1}{2}$ lbs. \$3.75; 25 lbs. \$5.00; by express.



KEROSENE EMULSION

This is a safe and sure remedy to kill all sucking insects, that is those which get their nourishment through a proboscis, which they insert into the leaves or bark. Price, qt. 60c; gal. \$1.25; by express.

SULPHO-TOBACCO SOAP

Is a powerful agent for the destruction of all bugs and insects. Of special value for spraying roses, shrubs and vines. One or two applications will rid plants of the pests. Full directions with each cake.

3-oz. cake makes 1 $\frac{1}{2}$ gallons, 14c; postpaid.

8-oz. cakes makes 4 gallons, 29c; postpaid.

10-lb. cake makes 80 gallons, \$3.00; by express, your expense.



WHALE OIL SOAP



It effectually destroys the mealy bug and almost all lice on indoor and outdoor plants. Simply make a suds and spray the plants with it. Price, 1 lb., postpaid 45c; not postpaid, 35c; by express, 2 lbs. 65c; 5 lbs. \$1.50.

CARBOLA

Prices of Insecticides and Spray Mixtures Subject to Change

Pest Exterminators

The postal laws of our land are such that we cannot send poisonous exterminators through the mails. We suggest that if you wish any of the small packages that you include them with your seed order and have them sent by express. Where we say postpaid we also mean prepaid.



We now offer **STERLINGWORTH CUTWORM KILLER** as a preparation which is quick and sure in effect and non-poisonous to animal. It is so alluring to Cut Worms that they are irresistibly attracted to it and eat it in preference to any vegetation. Dead Cut Worms may be seen wherever there are Cut Worms and Sterling Cut Worm Killer has been used. To protect plants in hills, sprinkle a small quantity of Killer around the plant. When in rows sprinkle both sides of row. Never sprinkle the plants with Sterlingworth Cut Worm Killer for the worm will climb for it and is likely to destroy the plant in reaching the Killer. Order Sterlingworth Cut Worm Killer when you buy your seeds and have it on hand ready for use at the right time. The cut worm does most of his damage in one or two nights and he will not wait for you. One pound is sufficient for 175 plants when in hills and 100 lineal feet when in rows. **Satisfaction Guaranteed or Money Refunded.** It is a coarse powder for sprinkling near the plants to be protected. Chickens and birds are not poisoned by it if they eat the dead worms. There is no guess work about it doing the business.

Price, 1 lb., postpaid 35c; not postpaid 25c; 5 lbs. not postpaid \$1.25; 25 lbs. \$4.00; 100 lbs. \$12.00.

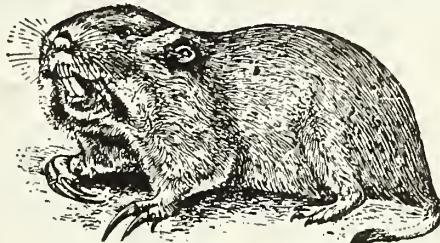
GOPHERGO

(Machine Poisoned Raisins)



It will exterminate gophers, squirrels, prairie dogs, rabbits, and is the only prepared poison that will get a gopher. The government advises poisoning as the most effective and best method of exterminating ground pests, but it must combine three points: An attractive bait, thoroughly poisoned, placed where they will get it. Gophergo does it. Try it, if it doesn't do the work we return your money. **Price, ½ lb. can, not postpaid, 30c; 1 lb. can, not postpaid, 60c; 2 lb. can, not postpaid, \$1.15; 8 lb. can \$3.00.**

NOX-EM-ALL GOPHER TABLETS



Pocket Gopher

Kills Pocket Gophers, Ground Squirrels, Prairie Dogs, Ground Hogs and other Rodents.

Pocket Gophers, Ground Squirrels and Prairie Dogs may be poisoned any time during the summer, but dry, sunshiny days in early spring when they first appear is decidedly the best time.

For Pocket Gophers make an opening in their run-way by pushing a common wagon rod or cone-shaped stick into the ground between the fresh made hills until you find it, drop in a few tablets, plug the hole to keep out light and to prevent earth falling on the tablets.

For Ground Squirrels and Prairie Dogs, scatter a few tablets in or near their holes. **Price, small pkg. 50c; large pkg. \$1.00.**

RAX—BEST RAT KILLER

You can kill the rats and mice around your place without danger to yourself or domestic animals of any kind. Rax is a preparation containing pure cultures of an active virus which has a deadly effect on mice, rats and field mice, but is harmless to all other animals, poultry, birds and human beings. They eat the bait and are taken with a violent fever, they transmit this to other rats and the rodents die. Don't plan to use a bottle now and then. Use enough bottles at one time to serve all the rats and mice on the place. This is the only really effective method. **Guaranteed to satisfy you or your money back. Price, 50c per bottle; postpaid.**

RAT CORN



If you have Rats or Mice use Rat Corn. No matter whether you have one rat or a thousand Rat Corn will do the work. One can of Rat Corn is better than a dozen cats. It mummifies your rodents; they leave no odor; become hard and dry like leather. Is not dangerous to handle. Harmless to human beings. **Price, 25c; 50c and \$1.00; postpaid.**

Prices of Insecticides and Spray Mixtures Subject to Change

Beekeepers Supplies

The highest standard of excellency in material and workmanship is found in our beekeepers' supplies. The best is always the cheapest. Our goods are sure to please. Prompt and careful attention given to all orders whether large or small, and mistakes promptly corrected.

The following prices are not postpaid.

OUR GUARANTEE—We absolutely guarantee our goods to be manufactured of the best material and workmanship. After examination, if our goods are not as represented, write us giving a careful explanation of the defect, and then, on our order, the goods may be returned at our expense, and we will refund your money with all transportation charges you have paid. If preferred, we will replace the order free of charge.

ROOT HIVES

These are single-walled, made of the best selected white pine, $\frac{7}{8}$ inch thick, and lock-cornered, or dovetailed, together to insure strength and squareness of fit. Tin rabbets for the frames to rest upon are furnished with all hive bodies, but not with supers. Most large as well as small producers including farmers and backloggers, in the milder climates, and even in the colder climates where they have good cellars, use this hive as the simplest, cheapest, strongest, and most easily handled hive. While the double-walled hive affords much greater protection, it is not adapted for out-apriary work necessitating the moving of colonies from one pasture to another, or from summer locations to winter locations.

We do not furnish division-boards in any of our standard hives as regular equipment because most beekeepers do not use them. When wanted, these must be ordered as an extra.

For convenience of beginners who do not know how to make up hive combinations and hive parts we are listing certain of the more popular combinations with prices. After one becomes familiar with the business he can make up any combination he desires. The hive below is a brood-chamber with cover and bottom, the basis of every combination. Any style of super or upper story may be ordered in connection with this to make a complete hive.

CHANGE OF PRICE

Owing to the fluctuations in the market price of the various raw materials used in the manufacture of our supplies, it may be necessary at any time to alter our prices on supplies. Therefore, all prices quoted herein are subject to change without notice.

TRANSPORTATION CHARGES

Unless otherwise specified, all prices in this catalog, or quotations by letter, are F. O. B. point of shipment.

SHIPPING INSTRUCTIONS

Always state in your order how you want goods shipped, whether by freight, express or mail. If you do not so instruct, we will use our own judgment in the matter.

GOODS DAMAGED IN TRANSIT

Deductions from face of invoice will not be allowed for loss or damage in transit unless paid freight bill properly endorsed by transportation company is sent to us with letter of complaint. Goods sent by parcel post should be insured.

In all hive and accessory quotations, N means nailed and K. D. knocked down, or in flat.

ONE-STORY STANDARD HIVE

While this hive is made either in eight-frame or ten-frame size, we recommend the ten-frame It consists of a bottom-board, double telescoping cover with metal cap and body or brood-chamber, with Hoffman frames furnished without foundation or with one-inch starters, or with full sheets of foundation, according to the order. No super or honey-storing chamber is included with this hive at the following prices, but any style of super listed on the following pages may be ordered separately for use on this hive. Other styles or cover, bottom, or frames may also be substituted. Nails and tin rabbets are included with all hives. Hand-hole cleats omitted unless ordered. The eight-frame size measures $13\frac{3}{8} \times 20$ inches, and $9\frac{1}{8}$ inches deep. The ten-frame hive is $16\frac{1}{4} \times 20$ inches, and $9\frac{1}{8}$ inches deep.

PRICE LIST OF ONE-STORY STANDARD HIVE

No Super or Upper Story Included with this Combination. Includes Reversible Bottom, Metal Cover, Inner Cover, Hoffman Frames, No Division Board.

One-story Standard Hive as described above with	Quan.	8 Frame	10 Frame
		Price	Price
No starters nor foundation.....	1 N	\$3.15	\$3.35
No starters nor foundation.....	1 KD	2.40	2.60
No starters nor foundation.....	5 KD	11.00	12.00
Inch foundation starters.....	1 N	3.30	3.50
Inch foundation starters.....	1 KD	2.50	2.70
Inch foundation starters.....	5 KD	11.50	12.50
Full sheets foundation.....	1 N	4.35	4.70
Full sheets foundation.....	1 KD	3.25	3.60
Full sheets foundation.....	5 KD	15.25	17.00

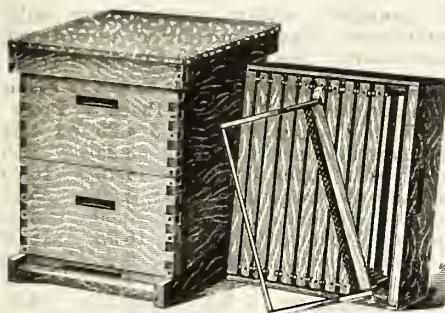
If a cheaper outfit is desired the Excelsior cover (page 110) may be substituted for the metal cover at a reduction of 25¢ each, either N or KD.



One-story Standard Hive With Metal Cover

IF INTERESTED IN BEGINNERS' OUTFITS, SEND FOR OUR SPECIAL CIRCULAR

Beekeepers' Supplies--Cont.



Two-story Standard Hive for Extractor Honey With Metal Telescope Cover

two-story, one body with frames over the

Two-Story Standard Hive for Extracted Honey

The two-story hive is very convenient for the man who has not much time to spend with his bees, as the farmer and fruit-grower. One of the greatest objections of the farmer against beekeeping is that he cannot afford to waste any time fussing with swarms. He would be willing to keep bees if he could place a few colonies in his orchard without having the "everlasting swarming." This difficulty may be largely overcome by the use of this hive run for extracted or chunk honey. Since bees swarm primarily because of a lack of room, if, instead of using a single-story hive, we use one of double capacity, the swarming tendency will be very materially lessened. It is therefore of advantage to the farmer as well as to the fruit grower to use hives of large size. This is the same as the one shown on preceding page except that it is two-story, one body with frames over the other. It has the same reversible bottom, cover and frames.

Price List of Two-story Standard Hive for Extracted Honey in Deep Frames

Equipped with reversible bottom, metal cover, inner cover, frames, but no division-board.

Two-story Standard extracting hive as described above with

	8 Frame	10 Frame
Quan.	Price	Price
No starters nor foundation	1 N 4.70	5.10
No starters nor foundation	1 KD .. 3.60	3.90
No starters nor foundation	5 KD .. 16.25	17.75
Inch foundation starters...	1 N 5.00	5.35
Inch foundation starters...	1 KD .. 3.85	4.10
Inch foundation starters...	5 KD .. 17.25	18.50
Full sheets foundation.....	1 N 6.75	7.60
Full sheets foundation.....	1 KD .. 5.25	5.85
Full sheets foundation.....	5 KD .. 24.50	28.00

Price List of Hive with One Shallow Extracting Super, 5 11/16 Inches Deep

Equipped with reversible bottom, metal cover, inner cover, frames, but no division board.

1½-story Extracting-hive as described above, One Super, with—

	8 Frame	10 Frame
Quan.	Price	Price
No starters nor foundation	1 N 4.30	4.60
No starters nor foundation	1 KD .. 3.20	3.45
No starters nor foundation	5 KD .. 15.00	16.00
Inch foundation starters..	1 N 4.55	4.85
Inch foundation starters..	1 KD .. 3.40	3.65
Inch foundation starters..	5 KD .. 15.75	17.00
Full sheets foundation.....	1 N 4.45	6.75
Full sheets foundation.....	1 KD .. 4.75	5.10
Full sheets foundation.....	5 KD .. 21.25	24.00

STANDARD HIVES FOR COMB HONEY IN PLAIN AND BEEWAY SECTIONS

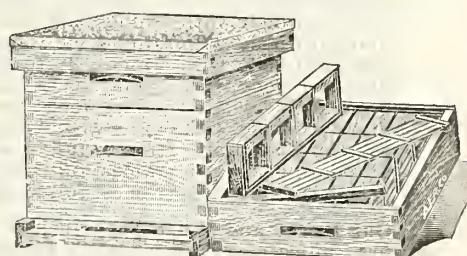
The following hive combinations are made up of the same hive body or brood-chamber, same bottom-board, and same cover, as the preceding combinations, but differing in the respect that the second story or super is fitted with section-holders and sections with the necessary separators or fences for the production of comb honey. There are several different styles of comb-honey supers, but the ones most commonly used are the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ plain or no-beeway, the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ slotted or beeway, and the $4 \times 5 \times 1\frac{1}{2}$ plain or no-beeway. If two story hives are wanted in this style, order an extra super for each hive. Price of supers on page 109.

PRICE LIST OF HIVE TAKING $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ PLAIN OR NO-BEEWAY SECTIONS

Equipped with reversible bottom, metal cover with inner cover, either one or two comb-honey supers, foundation as ordered, Hoffman frames but no division-board.

1½-story Comb-honey Hive as described above, One Super, with—

	8 Frame	10 Frame
Quan.	Price	Price
No foundation; no sections in super	1 N 4.30	4.55
No foundation; no sections in super	1 KD .. 3.25	3.50
No foundation; no sections in super	5 KD .. 15.00	15.25
Inch starters in frames and sec...	1 N 4.90	5.20
Inch starters in frames and sec...	1 KD .. 3.65	3.95
Inch starters in frames and sec...	5 KD .. 16.90	18.25
Full sheets in frames and sections	1 N 6.35	6.85
Full sheets in frames and sections	1 KD .. 4.75	5.25
Full sheets in frames and sections	5 KD .. 22.00	24.50



1½-story Hive for Comb Honey in $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ inch Plain Sections

THE BEEKEEPERS' FIFTEEN-CENT LIBRARY

The following books are neatly bound in paper, $4\frac{1}{2} \times 6$ inches, well illustrated—fine for beginners. Price 15 cents each, postpaid.

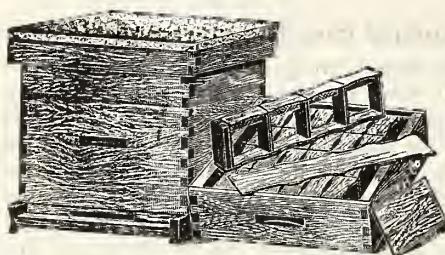
Spring Management of Bees.—A companion to "Building up Colonies."

Wintering Bees.—A late booklet by E. R. Root.

The Truth About Sweet Clover.—A. I. Root has compiled a large number of articles and letters on personal experiences with this new forage crop. 144 pages.

The Use of Honey in Cooking.—64 pages.

Beekeeper's Supplies—Continued



1½-story Hive for Comb Honey in 4½x4¾x1¾-inch Slotted or Beeway Sections

Price List of Hive Taking 4¼x4¾x1¾ Slotted or Beeway Sections

Equipped with reversible bottom, metal cover with inner cover, one comb-honey super, foundation as ordered, frames, but no division-board. See page 109 for super.

1½ story Comb-honey Hive as Described above, One Super, with—	Quan.	8-Frame Price	10-Frame Price
No foundation; no sections in super	1 N	\$ 4.25	\$ 4.55
No foundation; no sections in super	1 KD	3.25	3.50
No foundation; no sections in super	5 KD	14.75	16.00
In. starters in frames and sections..	1 N	4.80	5.15
In. starters in frames and sections..	1 KD	3.60	3.90
In. starters in frames and sections..	5 KD	16.75	18.00
Full sheets in frames and sections..	1 N	6.25	6.80
Full sheets in frames and sections..	1 KD	4.65	5.15
Full sheets in frames and sections..	5 KD	21.75	24.25

Price List of Hive Taking 4x5x1¾ Plain or No-beeway Sections

Equiped with reversible bottom, metal cover with inner cover, one comb-honey super, foundation as ordered, frames, but no division-board. See page 109 for super.

1½ story Comb-honey Hive as described above, One Super, with—	Quan.	8-Frame Price	10-Frame Price
No foundation; no sections in super	1 N	\$ 4.40	\$ 4.70
No foundation; no sections in super	1 KD	3.40	3.65
No foundation; no sections in super	5 KD	15.50	16.75
Inch starters in frames and sections.....	1 N	5.00	5.30
Inch starters in frames and sections.....	1 KD	3.80	4.10
Inch starters in frames and sections.....	5 KD	17.50	18.75
Full sheets in frames and sections	1 N	6.45	7.00
Full sheets in frames and sections	1 KD	4.85	5.35
Full sheets in frames and sections	5 KD	22.50	25.00

What is said about the Root hive on page 106 applies, of course, to Root hive bodies. The ten-frame size, measures 16¼x20 inches and is 9 9/16 inches deep. The eight-frame body is 13⅓x20 inches, and 9 9/16 inches deep, using the same frames. The hive-body may be used either as a brood chamber, i. e., the lower story of the hive, or as a full-depth upper story or super for extracted honey, thus forming a two-story hive as listed on page 107.

The Danzenbaker hive is made only in the ten-frame size and measures 16¼x20x7¾ inches deep. It is furnished with closed-end frame, which, being supporter by pivots in the middle of each end-bar, are reversible. A division-board is furnished with this hive, it being necessary to hold the frames tightly together.

Danz. hive-body in ten-frame size only is same price thoughout as the standard eight-frame hive-body.

Price List of Standard Hive Body or Brood-Chamber, 9 9/16 Inches Deep

Nails and tin rabbets included with bodies. No division-board unless so ordered.

Description	Quan.	8-Frame Price	10-Frame Price
Empty Standard body without frames	1 N	\$ 1.00	\$ 1.05
Empty Standard body without frames	1 KD	.80	.85
Empty Standard body without frames	5 KD	3.50	3.75
Standard body with frames, no foundation	1 N	1.55	1.75
Standard body with frames, no foundation	1 KD	1.25	1.35
Standard body with frames, no foundation	5 KD	5.25	5.85
Standard body with frames, inch starters	1 N	1.75	1.90
Standard body with frames, inch starters	1 KD	1.40	1.50
Standard body with frames, inch starters	5 KD	5.75	6.35
Standard body with frames, full sheets	1 N	2.65	3.00
Standard body with frames, full sheets	1 KD	2.15	2.45
Standard body with frames, full sheets	5 KD	9.85	11.50

Our Prices and What They Include.—Before comparing our prices with those of any of our competitors, notice carefully what we furnish with our regular equipment. Note in particular the superior cover that we furnish, which will outlast many times any wood cover made.

THE BEEKEEPERS' FIFTEEN-CENT LIBRARY

The following books are neatly bound in paper, 4½x6 inches, well illustrated—fine for beginners. Price 15 cents each, postpaid.

Answers to 150 Questions Commonly Asked on Bees.—By the editors of Gleanings in Bee Culture. It's crammed with practical points. 72 pages, indexed.

Beekeepers' Dictionary.—Just what the name indicates—a glossary of the technical terms used in the literature of apiculture.

Habits of the Honeybee.—By E. F. Phillips, Ph. D.,

in charge of the agricultural investigations of the U. S. Government.

Feeds and Feeding.—By E. R. Root. Various ways of making feeds and the feeders to use. 32 pages.

Building up Colonies.—Plain instructions on getting colonies in shape for the honey-flow. A hand book for spring.

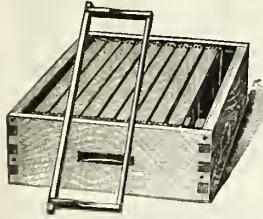
Beekeepers Supplies--Cont.

SHALLOW EXTRACTING SUPERS 5 11/16 Inches Deep

Used in the production of chunk honey. Also for producing extracted honey in shallow frames, two frames fitting together in an extractor comb-pocket of 12-inch width. These supers may also be used as one brood chamber, such being called a sectional or divisible brood-chamber hive, and any style of super may be used above for comb or extracted honey. The same depth of super is used with section frames for the $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{8}$ section, and with hanger cleats added, for shallow Danzenbaker frames or section-holders taking the $4 \times 5 \times 1\frac{1}{8}$ section. This is our regular extracting super, 5 11/16 inches deep, and is furnished with shallow Hoffman frames, 5 $\frac{1}{8}$ inches deep, with or without foundation.

Price List of Shallow Extracting Supers or Sectional Brood-Chamber, 5 11/16 Inches Deep

Furnished empty or with frames. No tin rabbits or division boards furnished. The same super fitted with shallow Danzenbaker frames would cost 5 cents each more.



Shallow Extracting Super

Description	8-Frame	10-Frame
Quan.	Price	Price
Empty super body, no frames.....	1 N .67	.70
Empty super body, no frames.....	1 KD .47	.50
Empty super body, no frames.....	5 KD 2.15	2.25
Super with shallow frames, no foundation.....	1 N 1.10	1.20
Super with shallow frames, no foundation.....	1 KD .78	.86
Super with shallow frames, no foundation.....	5 KD 3.50	3.90
Super with frames, 1-inch starters	1 N 1.25	1.35
Super with frames, 1-inch starters	1 KD .89	.97
Super with frames, 1-inch starters	5 KD 4.10	4.50
Super with frames, full sheets	1 N 1.95	2.15
Super with frames, full sheets	1 KD 1.30	1.60
Super with frames, full sheets	5 KD 6.00	7.00

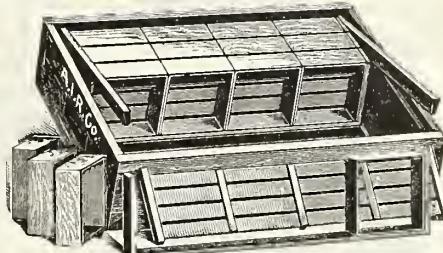
4 $\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ PLAIN SECTION SUPER

This plain section super made in eight and ten frame sizes $4\frac{1}{4}$ inches deep, may be used on all our single or double walled hives, tiered up one or more high. It takes beveled cleats and wedges, plain section-holders and fences, super springs, and is furnished with or without inch starters or full sheets of foundation. There are six section-holders in the eight-frame super, and seven in the ten-frame, each section holder being made to hold four sections.

Price List of Plain Section Super for $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ Plain Sections, $4\frac{1}{4}$ Inches Deep

Super complete without sections includes nails, flat tins, bevel cleats, end-stops, super springs, plain section holders, and fences. For empty super see next price list.

Description	8-Frame	10-Frame
Quan.	Price	Price
Super without sec. or foundation....	1 N \$1.15	\$1.22
Super without sec. or foundation....	1 KD .90	.97
Super without sec. or foundation....	5 KD 4.00	4.35
Super with sections, 1-inch starter..	1 N 1.60	1.73
Super with sections, 1-inch starter..	1 KD 1.17	1.28
Super with sections, 1-inch starter..	5 KD 5.45	5.95
Super with sections, full sheets.....	1 N 2.15	2.35
Super with sections, full sheets.....	1 KD 1.60	1.70
Super with sections, full sheets.....	5 KD 7.00	8.00



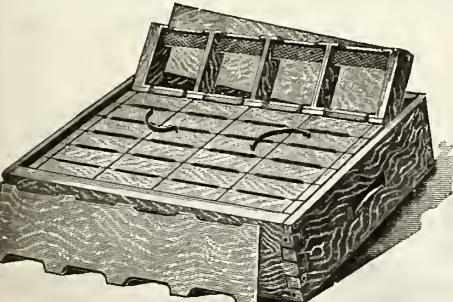
$4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ Plain Section Super

4 $\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ SLOTTED SECTION SUPER

This slotted or beeway section super, made in eight and ten frame sizes, $4\frac{1}{4}$ inches deep, is the old-style section-super, and is most commonly used. It takes slotted section-holders, slotted wood separators, follower, and springs, and is furnished with or without sections, and with or without inch foundation starters or full sheets.

Price List of Slotted Section Super for $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ Beeway Sections, $4\frac{1}{4}$ Inches Deep

Super complete without sections includes nails, flat tins, slotted section-holders, slotted separators, follower, super-springs.



Description	8-Frame	10-Frame
Quan.	Price	Price
Empty super only, no fittings	1 N \$.66	\$.67
Empty super only, no fittings	1 KD .43	.45
Empty super only, no fittings	5 KD 1.95	2.05
Super without sec. or foundation....	1 N 1.10	1.16
Super without sec. or foundation....	1 KD .82	.88
Super without sec. or foundation....	5 KD 3.60	3.90
Super with sections, 1-inch starters	1 N 1.55	1.64
Super with sections, 1-inch starter	1 KD 1.10	1.19
Super with sections, 1-inch starter	5 KD 5.00	5.45
Super with sections, full sheets	1 N 2.00	2.15
Super with sections, full sheets	1 KD 1.50	1.59
Super with sections, full sheets	5 KD 6.75	7.60

Beekeepers Supplies---Continued

4x5x1½ PLAIN SECTION SUPER

We recommend this super in preference to any other comb-honey super that we sell, especially in the ten-frame size. This is a deeper super, 5 11/16-in. and is fitted with hanger cleats to support section-holders and M. fences with end wedges and springs. The regular 16 ¼ in. ten-frame width will easily admit eight section-holders and eight fences with super springs.

Price List of Section Super for 4x5x1½ Plain Sections, 5 11/16 Inches Deep

Super complete without sections includes hanger-cleats, end-stops, sections-holders, fences, super springs, and nails.

Description	Quan	8 Frame Price	10 Frame Price
Super without sec. or foundations ..	1 N	1.25	1.32
Super without sec. or foundations ..	1 KD	1.00	1.07
Super without sec. or foundations ..	5 KD	4.60	4.95
Super with sections, 1-in. starters..	1 N	1.65	1.78
Super with sections, 1-in. starters..	1 KD	1.28	1.38
Super with sections, 1-in. starters..	5 KD	5.90	6.40
Super with sections, full sheets	1 N	2.15	2.35
Super with sections, full sheets	1 KD	1.65	1.75
Super with sections, full sheets	5 KD	7.50	8.25

HIVE COVERS AND BOTTOM-BOARDS

Metal-roofed Double Cover

This cover, formerly designated as the Rc cover, has given such universal satisfaction that we adopted it some time ago for all our hive combinations. It is the cover which we furnish regularly unless otherwise specified.

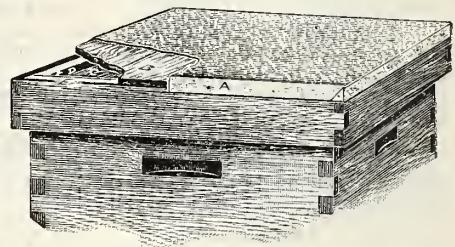
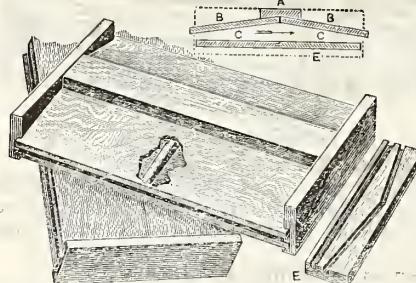
In localities where lumber checks badly, or where paint does not seem to stick to the wood well, this metal-bound double cover effectually shuts out the wind and weather, and at the same time affords an excellent protection against the hot sun of warm climates and the cool chilly nights of spring and fall in the northern climates.

This cover is not complete without the inner cover, which is simply a bee-escape board without the escape and is included in the prices quoted below. Its purpose is to prevent the outer cover from becoming stuck down with propolis, and make it bee-tight. Description of inner cover is given at bottom of this page.

Description	Quan	8 Frame Price	10 Frame Price
Metal cover with inner cover	1 N	1.35	1.45
Metal cover with inner cover	1 KD	1.15	1.20
Metal cover with inner cover	5 KD	5.50	5.75

EXCELSIOR COVER

Our excelsior cover is entirely different from any other cover by that name on the market. Its advantages, which we have patented, are that the two side-boards, instead of being rabbeted down to $\frac{1}{2}$ inch at the ends, are left full thickness, the same fitting into a $\frac{3}{8}$ -inch groove of the end-cleats, and the sides and edges of the boards are molded on a special machine so they will shed water, while the under side is flat.



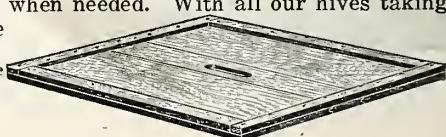
and under boards are inserted. The $\frac{3}{8}$ -inch space on the sides along the whole width of the hive permits of a free and constant circulation of air. It is furnished only when so ordered, and is the same price as the Excelsior cover.

Description	Quan	8 Frame Price	10 Frame Price
Ventilated Gable Cover.....	1 N	.90	.95
Ventilated Gable Cover.....	1 KD	.65	.70
Ventilated Gable Cover.....	5 KD	3.00	3.15

INNER COVER

To prevent the bees from sticking down the telescope covers like the two shown above, an inner cover is needed. By far the most satisfactory cover is a bee-escape board. These are $\frac{3}{8}$ inch thick with a wood rim and hole for bee-escape to be inserted when needed. With all our hives taking the regular metal cover, these are included KD. See page 113 for escapes.

Description	Quan	8 Frame Price	10 Frame Price
In. cov. or bee-escape board, no escape	1 KD	.23	.23
In. cov. or bee-escape board, no escape	5 KD	1.00	1.00

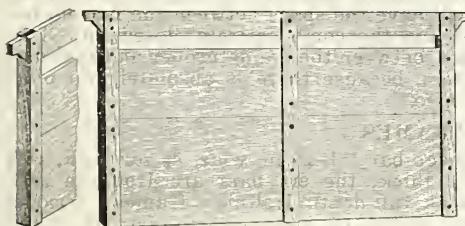
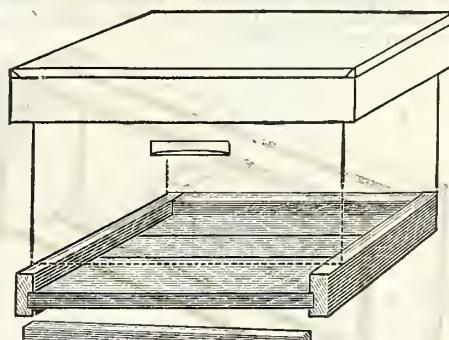


Beekeeper's Supplies — Continued

REVERSIBLE BOTTOM BOARD

This is our standard bottom-board which is furnished with all the hives unless otherwise specified. It is so constructed that when turned one side up it provides a $\frac{3}{8}$ -in. space under the frames, while the other side, which should be used in summer, gives a $\frac{7}{8}$ -inch space. The floor-boards which are $\frac{3}{8}$ inch tongued and grooved, are slid into grooves in the outer rim or frame and nailed in such a way that swelling and shrinking is taken care of. The whole bottom is solid and substantial, being constructed of cypress which will not rot. The entrance-cleat is constructed so as to give a very small opening, and is removed entirely in warm weather or during a honey-flow.

Description	Quan	8 Frame	10 Frame
Reversible cypress bottom-board	1 N	\$.60	\$.63
Reversible cypress bottom-board	1 KD	.45	.48
Reversible cypress bottom-board	5 KD	2.05	2.65



Plain Division-board—No Chaff

Plain Division Board—No Chaff

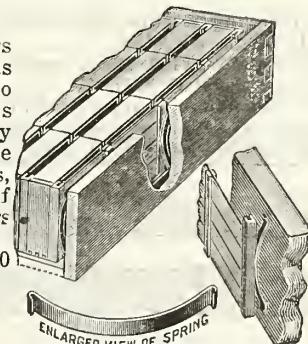
This is used as a follower with spacing-frames, such as the Hoffman or closed-end. They have the same outside dimensions as brood-frames with end-bars $\frac{3}{4}$ inch square and panels $\frac{3}{16}$ thick that slip into the groves in the end-bars. When there is less than the required number of combs to fill the hive, division-boards are almost a necessity to prevent the bulging of the outside combs.

	Each	Per 10
Plain division board, KD.....	.14	1.20
Plain division board, ND.....	.11	1.00

SUPER SPRINGS

All of our supers are equipped with Hetherington super-springs which cause a gentle yielding pressure upon the sections. A spring is far better than any wedge or thumb-screw, because it adapts itself to variations of climate, causing a shrinkage and swelling of the contiguous parts. A flat spring will take up the gaps and keep the parts firmly squeezed together. Without springs or some form of compression, the bees will chink in propolis at every crack made between the sections, separators, or fences. The result of all this is that a large amount of propolis has to be scraped off the edges of the sections and separators contiguous to each other.

Super-springs, 1c each; weight of 100, $1\frac{1}{2}$ lbs; .85 per 100; \$7.00 per 1000.



ENLARGED VIEW OF SPRING

COATED WIRE NAILS FOR HIVES, ETC.

Prices subject to market changes

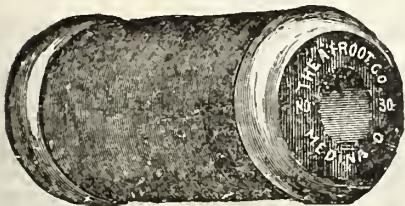
Size	Price Per lb.	Per 10 lbs.	Price Per lb.	Per 10 lbs.
1-in., very fine and slim	\$.20	\$1.80		
2d, regular fine, for nailing frames....	.20	1.80	5d, $1\frac{1}{2}$ in. long .....	.15 1.30
3d, $1\frac{1}{8}$ in. long, for nailing cases.....	.20	1.80	6d, $1\frac{1}{8}$ in. long .....	.15 1.30
4d, $1\frac{1}{8}$ in. long .....	.15	1.30	7d, $2\frac{1}{8}$ in long, for nailing hives .....	.15 1.30

TINNED WIRE

No. 30 tinned wire is the most suitable of any for wiring frames. Its purpose is to hold foundation or combs securely in the frames, and at the same time reduce the danger of sagging.

670 feet are required for 100 Hoffman frames.

Sizes Furnished	each	wt.
$\frac{3}{4}$ -oz. spools tinned wire	85 ft.	\$.07 2 oz.
$\frac{1}{4}$ -lb. spools tinned wire	463 ft.	.17 6 oz.
$\frac{1}{2}$ -lb. spools tinned wire	926 ft.	.28 10 oz.
1-lb. spools tinned wire	1850 ft.	.45 18 oz.
5-lb. coils tinned wire	1.65	5 lbs.

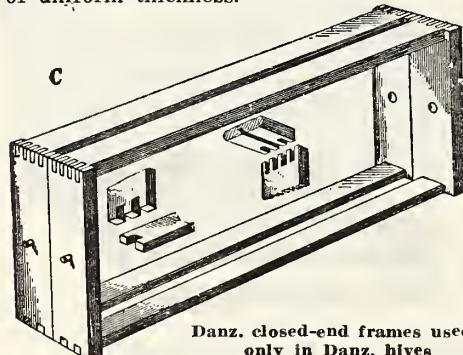


Spool of No. 30 Tinned Wire

Bee Keeper's Supplies---Continued

THE HOFFMAN FRAME

This holds it popularity better than any device we ever sold, and we furnish it regularly with all our hives unless otherwise specified. For a hanging frame it is the best self-spacer we know. It saves labor in that it can be handled in groups of three or four; and any particular frame can be removed without thumbing over nearly all the other frames in the hive to get room. Beginners cannot fail to get them spaced just right, therefore the combs are even in surface and of uniform thickness.



Danz. closed-end frames used
only in Danz. hives

secures solid cards of comb without any pop-holes, or space, between the frame proper and the comb itself. When hunting a queen this is quite an important item, because there is absolutely no place for her to hide. This frame can be used only in the Danz hive.

SHALLOW EXTRACTING FRAMES

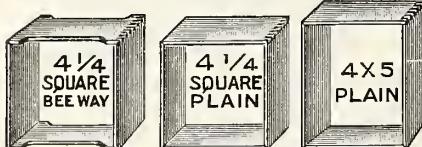
These are made like regular Hoffman frames, but with top-bar 1 1/16 in. wide, 3/8 in. thick, 18 3/4 in. long, with single groove. Bottom-bar is 3/4 wide and 1/4 thick; the end-bars are Hoffman self-spacing style 3/8 thick by 5 3/8 long, end-spaced with staple as full-depth Hoffman frames. Frames with 7/8 x 1/2 in. top-bar also furnished at same price, or with 1/2 x 1 1/16 corner-cut top-bar at 30 cts. per 100 extra.

PRICES OF FRAMES

	In flat without wire		
Following is furnished without foundation:	10	100	500
Hoffman, 9 1/8 x 17 1/8	50	4.50	21.00
Shallow, 3/8 x 1 1/16-in. top-bar	40	3.50	16.00
Danz brood, 7 7/16 x 17	35	4.00	19.00
Wedges for old-style Hoffman frame	per 100	.25	



The kinds of sections commonly used



DANZ. HANGER-CLEATS

These are used in the Danz. hive and super (the 4x5 section-super) for the supporting pins to rest upon. Listed below.

Price List of Inside Fix-	Pr.
tures for Supers	100
Slotted section-holders	3.00
Plain section-holders	2.60
Slotted wood sparators	1.55
Slat separators	3.00
P fences	3.00
Bevel-cleats for P supers 8f.-65	
Bevel-cleats for P supers 8 fr .65	

Bevel-cleats for P "	10-fr .70	8-fr. P. flat tins 15x 7/8.....	.80
End stops for P super 8-fr....	.65	10-fr. P flat tins 15x 7/8.....	.85
End-stops for P supers 10 fr .70		Danz. section holders 1 3/8 in..	3.25
Tin Rabbets, T Tins, Flat Tins		Danz. section-holders 1 1/2 in..	3.35
8-fr. tin rabbets 12-in	1.65	Danz. hanger cleats 8-fr.....	2.75
10-fr. tin rabbets 14-in.....	1.65	Danz. hanger-cleats 10-fr.....	2.75
8-fr. S flat tins 18x 7/8.....	.70	Danz. end-stops 8 fr.....	1.00
10-fr. S flat tins 15x 7/8.....	.75	Danz. end-stops 10-fr.....	1.05

Beekeepers' Supplies--Cont.

PRICE LIST OF COMB FOUNDATION

The package numbers in the following price list are for medium and light brood sizes $7\frac{1}{8} \times 16\frac{1}{4}$, and for thin and extra thin super sizes $3\frac{1}{8} \times 15\frac{1}{4}$ only. Other regular sizes are the same price in like grades and quantities, and are designated according to the key below.

Price per pound packed in boxes as follows:

Quantity	Medium Brood	Light Brood	Thin Super	Ex. Thin Super
One 1-lb. box.....	\$0.75	\$0.77	\$0.85	\$0.88
One 2-lb. box.....	.74	.76	.82	.87
Five 1-lb. boxes.....	.74	.76	.82	.87
One 5-lb. box.....	.73	.75	.80	.83
Ten 1-lb. boxes.....	.73	.75	.80	.83
Two 5-lb. boxes.....	.71	.73	.78	.81
25 1-lb. boxes.....	.71	.73	.78	.81
Five 6-lb. boxes.....	.69	.71	.76	.79
One 25-lb. box.....	.68	.70	.75	.78

ROOT SECTION-PRESS AND STEAM FOUNDATION-FASTENER

This is the first season we have offered the Root Steam Foundation Fastener to the public. It has been tried out thoroly both by experts and novices, and will positively do quicker and better work than any device we ever sold for the purpose. It is cleaner, there being no soot nor smoke, and no danger of fire from wax dropping into the lamp.

Steam foundation-fastener and press, for $4\frac{1}{4}$ sections.....	\$3.25
Steam foundation-fastener and press, for 4×5 sections.....	3.25
Steam boiler with safety valve for use with above.....	2.75
Oil stove for heating boiler, "Summer Girl".....	1.30
Root section-press only without steam attachment.....	2.00

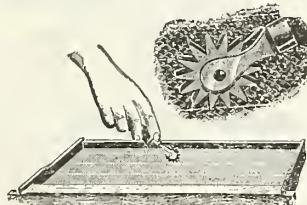
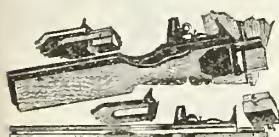
CARLIN'S FOUNDATION-CUTTER

These are very convenient for cutting a great number of small pieces. The wheel should be kept hot by imersing in hot water. Carlin foundation-cutter, tin wheel, 28c.



SPUR WIRE-IMBEDDER

This is an excellent device for imbedding the wires of frames into the sheets of foundation. The teeth are broad and blunt so there is no danger of weakening the foundation. It should be kept hot so that each tooth melts a small amount of wax to the wire. Spur wire-imbedder, 3 oz. 28c.



DAISY FOUNDATION FASTENER

Without lamp.....	\$1.20
With lamp.....	1.66

PARKER'S FOUNDATION-FASTENER

We list this merely to accommodate those who prefer it. Parker foundation-fastener, 1 lb. 40c.

ROOT FOUNDATION-FASTENER

With lamp..... 70c
Without lamp..... 28c

Daisy

PORTER BEE-ESCAPES

In taking off honey the bee-escape is the greatest labor-saver ever invented. It frees the supers of bees so that no shaking of heavy supers nor smoking is necessary. Moreover, there is no need of receiving a single sting, and robbing cannot get started. When placed between the super and brood chamber the escape board with either a single or double bee-escape will free the super in 12 to 24 hours. The double escape shown above has two exits, instead of one, which will allow the bees to pass out in case one exit should become clogged. All Porter escapes fit same size hole in board.

Weight Each Dozen

Porter single escape without board.....	1 oz.	\$0.20	\$2.10
Porter double escape without board.....	1 oz.	.23	2.30
Porter board with single escape, nailed....		.45	4.00

Each Ten

Porter board with double escape, nailed.....	\$0.47	\$4.30
Hodgson ventilated escape-board without escape.....	.53	5.00
Hodgson ventilated escape-board—double escape.....	70.	6.75

Porter board with double escape, nailed.....	\$0.47	\$4.30
Hodgson ventilated escape-board without escape.....	.53	5.00
Hodgson ventilated escape-board—double escape.....	70.	6.75

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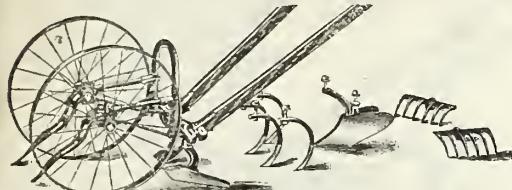
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Iron Age Garden Implements

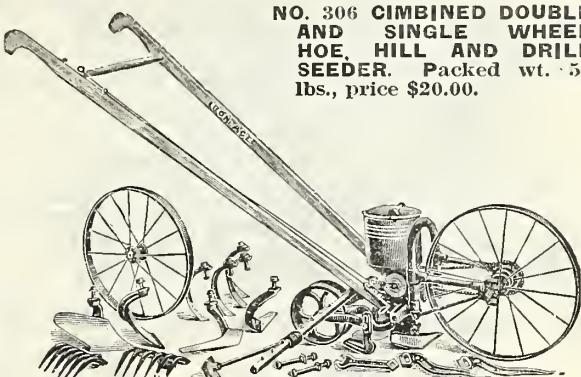
NO. 301 DOUBLE AND SINGLE WHEEL HOE



Packed weight, 40 lbs.

No. 301-R, Complete (like cut).....	\$12.00
No. 301 Like cut without Rakes.....	\$11.00
No. 303 With Side Hoes only.....	\$ 7.75
No. 313 With Side Hoes and Teeth.....	\$ 9.50

NO. 306 CIMBINED DOUBLE AND SINGLE WHEEL HOE, HILL AND DRILL SEEDER. Packed wt. .57 lbs., price \$20.00.



No. 306 as cut, except no rakes..... \$19.00
No. 316 Hill and Drill Seeder only, no tools..... \$13.50

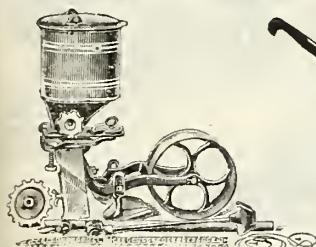
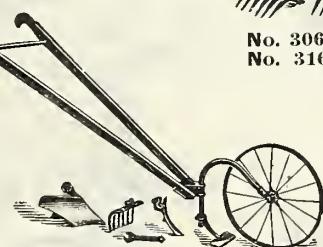


Fig. 333, Drill Seeder Attachment for No. 306, 308, 304 and 305. Price Hill and Drill \$8.50; Drill only, \$7.50.



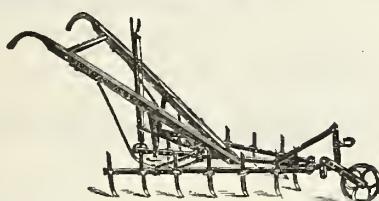
No. 11 Like cut with plow only \$4.50.
No. 12 Complete (like cut) 4 tools, \$5.75.

NO. 19C WHEEL PLOW AND CULTIVATOR



The wheel is made of steel, 24 inches high, and is very strong. The tire is 1 inch in width. The frame is made of steel throughout. The handles are made of best oak.

Price complete with 5 tools \$6.00



No. 1014 E. P., price with lever expander as in cut \$10.50

No. 1014 E., price without wheel..... 9.50

No. 2013, price, plain without wheel or lever 7.50

NO. 1007. E. P. SEVEN TOOTH CULTIVATOR.

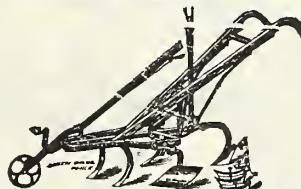
Price as in cut.....\$10.50



No. 304, Same tool as No. 306, except does not drop in hills, \$18.00.

No. 318, Drill Seeder only, \$12.50.

NO. 600. E. L. HORSE HOE



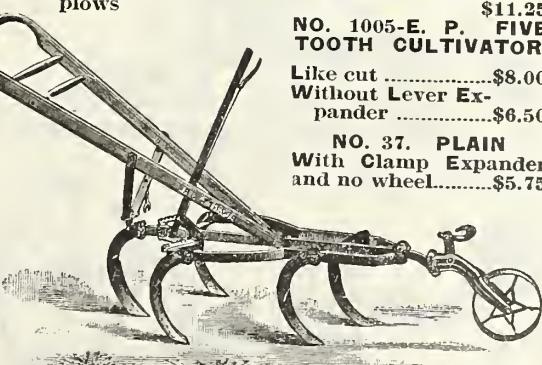
Complete (like cut), \$12.25

No. 600, E. P. like 600 E. L. but with plain wheel	..... \$11.50
No. 607 E. P. like 600 E. L. without side plows	..... \$11.25

NO. 1005-E. P. FIVE TOOTH CULTIVATOR.

Like cut \$8.00
Without Lever Expander \$6.50

NO. 37. PLAIN
With Clamp Expander and no wheel.....\$5.75

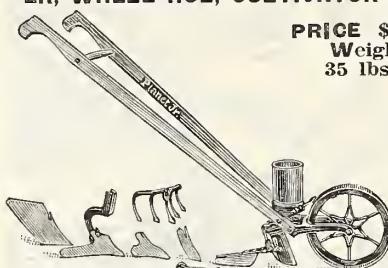


ASK FOR SPECIAL IRON AGE CATALOGS OF HAND TOOLS, HORSE TOOLS, SPRAYERS. POTATO PLANTERS AND DIGGERS.

Planet Jr. Garden Tools

NO. 31 PLANET JR. COMBINED DRILL, SEEDER, WHEEL HOE, CULTIVATOR AND PLOW

PRICE \$11.50
Weight
35 lbs.



New this year. An accurate seeder and a first class single wheel hoe at a low price.

NO. 3 PLANET JR. HILL AND DRILL SEEDER

Price \$16.00
Holds 3 Quarts of Seed
Weight, packed, 43 lbs.

A favorite among onion growers, market gardeners and seedmen.



NO. 12 DOUBLE WHEEL HOE, CULTIVATOR AND PLOW. Price, \$11.00

Weight 33 lbs.

We offer these Wheel Hoes as the highest type of their class. They have a great variety of tools which adapt themselves to a

large variety of work, and there is scarcely any garden culture of which they are not capable.

PLANET JR. TWELVE-TOOTH HARROW, CULTIVATOR AND PULVERIZER

No. 90 Complete, with Steel Wheel, \$17.50.
Weight, packed,
74 lbs.

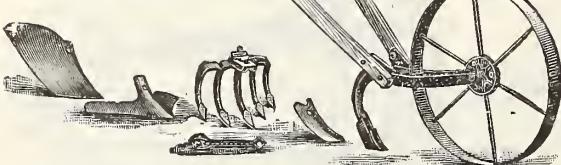
No. 90 B, Without Pulverizer, \$14.50.

No. 90 D, Without Pulverizer or Wheel, \$11.25.



NO. 19 PLANET JR. SINGLE WHEEL HOE CULTIVATOR AND PLOW

Price \$5.50, weight
21 lbs.



This attractive implement is especially designed for the farmers garden work. It is a cheap and effective tool for wheel hoe operations.

NO. 4 PLANET JR. COMBINED HILL AND DRILL SEEDER, WHEEL HOE, CULTIVATOR AND PLOW

Price, Complete, \$17.00
Weight, 50 lbs.

As a Seeder Only, \$13.50.
Holds 2½ Quarts of Seed.

Plants in hills
4, 6, 8, 12 or
24 in. apart.

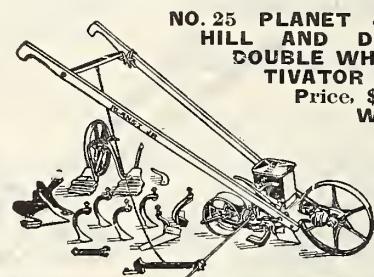
For use as a
cultivator, the
drill parts are
removed and
the tool frame

substituted by changing but one bolt; it is then a perfect single wheel hoe, with a variety of tools.



NO. 25 PLANET JR. COMBINED HILL AND DRILL SEEDER, DOUBLE WHEEL HOE, CULTIVATOR AND PLOW.

Price, \$20.00.
Weight, packed,
61 lbs. Holds
2½ Quarts of Seed.



The simplicity of this tool, both as a seeder and as a wheel hoe, makes the combination thoroughly practical. Two acres a day can easily be worked with this implement.

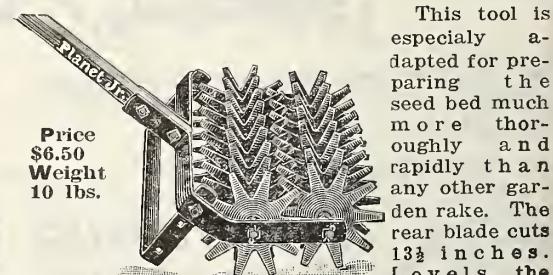
NO. 103 PLANET JR. COMBINED HORSE HOE AND CULTIVATOR

Price \$13.50. Weight 60 lbs.
No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe



and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain yet it is light and easy to handle.

STAR PULVERIZER, LEVELER and WEEDER



This tool is especially adapted for preparing the seed bed much more thoroughly and rapidly than any other garden rake. The rear blade cuts 13½ inches. Levels the ground perfectly. It is a fine tool to use after the crop is started, breaking the crust, cutting off the weeds and leaving a fine mulch. It works equally well forward or backward. Price, \$6.50; by express or freight.

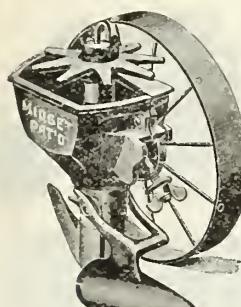
This attractive implement is especially designed for the farmers garden work. It is a cheap and effective tool for wheel hoe operations.

FOR COMPLETE LIST OF FERTILIZER, SEE PAGE 127.

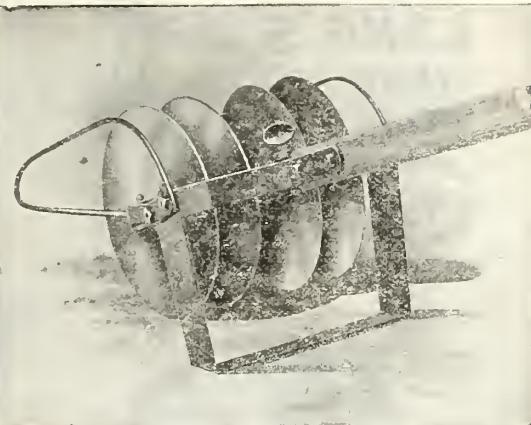
A NEW MIDGET DRILL**Sows All Seeds**

This is just the drill for the little garden. It stands about 8 inches high and will sow a 5c package of seed just as well as larger amounts. Can be attached to a wooden handle and used in a hot bed or green house. Hopper holds 1 pint. The machine is made as good as larger ones. Index shows how to set.

It can be attached to a No. 20 Standard Wheel Hoe. Price **Wheel Hoe and Midget Drill Combined, \$8.00.**

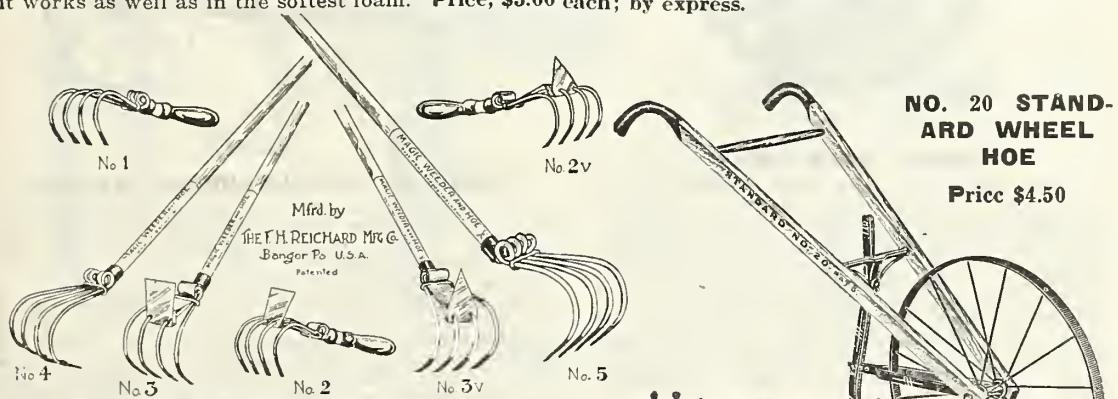


Midget Drill
Price \$3.75



Perfection

The Newest Garden Cultivator. The new Disc and Knife Weeder and Mulcher is the final evolution in hand cultivators. It excels and supersedes all. A child can work it. It has no attachments, is complete in itself. The stiff wire leaf guards keep the tops of the plants away from the discs. It can be worked in gravel soil, through sticks and coarse straw or stubble of any kind. In stony land it works as well as in the softest loam. **Price, \$5.00 each; by express.**

PERFECTION**MAGIC WEEDEER AND HOE**

The best garden tool on the market. It does the work with half the labor, saving both time and strength. The tongs are formed so as to enter the ground the same as a garden plow, lifting and pulverizing the soil, leaving a dust mulch, thereby holding the moisture, which is so essential to the rapid growth of young plants. From the picture you get an idea of the different styles.

- No. 1. Postpaid, 45c; not postpaid, 35c.
- No. 2. Postpaid, 55c; not postpaid, 45c.
- No. 2-V. Postpaid, 65c; not postpaid, 45c.
- No. 3. Postpaid, 90c; not postpaid, 75c.
- No. 3-V. Postpaid, 90c; not postpaid, 75c.
- No. 5. Postpaid, 90c; not postpaid, 75c.
- No. 5. Postpaid, \$1.00; not postpaid, 95c.

NO. 20 STAND-ARD WHEEL HOE

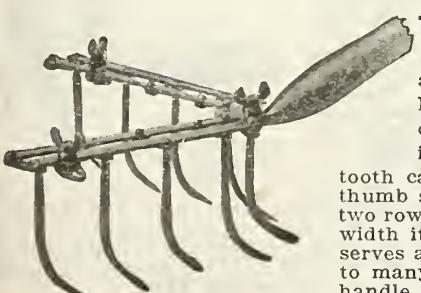
Price \$4.50

Midget Drill and Hoe

This cultivator has 5 combined tools as shown in cut. Is light, yet strong. All tools made of steel as hard as a saw and nicely polished. Strong, tangent spokes, 24-inch wheel.

THE PULL-EASY GARDEN CULTIVATOR

This handy little garden tool is adjustable to any width. A patented groove slide, secured by handy thumb screws, allows the working width of the cultivator to be varied from 7 to 18 inches. When the plants are young, the middle tooth can be removed by the simple loosening of a thumb screw, allowing the plants to be straddled and two rows worked at once. When spread out to its full width it can be used as an ordinary rake. Since it serves as both a rake and a cultivator it can be put to many uses about the yard or garden. Length of handle is 4½ feet. **Price: Garden Cultivator \$1.50; Junior Cultivator, 60c; by express.**



Pull Easy

LITTLE GIANT MOLE TRAP

Most simple and best trap on the market. Fully guaranteed to give satisfaction. **Price, 90c each; postpaid.**

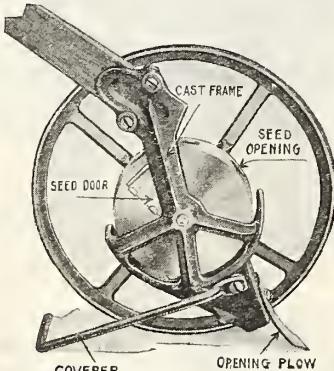


Mole Trap

LANG'S HAND WEEDER

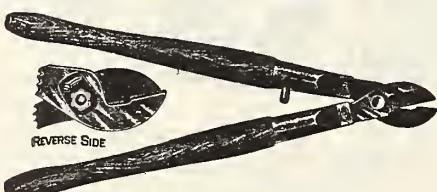
HANDIEST
TOOL
ON EARTH.

Price, postpaid, 35c; not postpaid, 25c.



EUREKA SEED DRILL

It will sow and cover Beets, Cabbage, Carrots, Celery, Lettuce, Onions, Radishes, Spinach, Turnips, and all such seeds with the greatest regularity, much better and faster than hand work. It is not a toy, but a strong, practical machine. Of course, when you have a large garden you will want our Iron Age Drill, but for a few vegetables the Eureka is superb. It is the only machine suited to sow in a hotbed. Sows the smallest packet of seeds as well as a large bulk. Price, \$1.50 postpaid; by express, \$1.25.



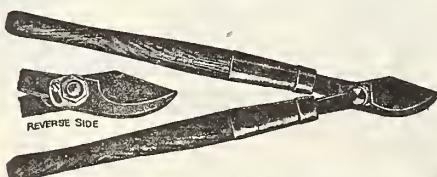
NO. 9 PRUNER

A good grade of steel, with polished blades. Price, \$1.75, by express.



PRUNING SHEARS

Nine-inch forged steel polished blades, volute sprung. Price, postpaid, \$1.40; not postpaid, \$1.20.



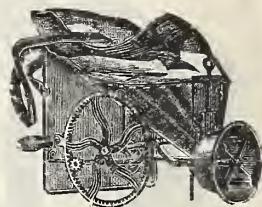
NO. 136 PRUNER

The best grade of forged steel. Handles 22 inches long. Price, \$2.40; by express.



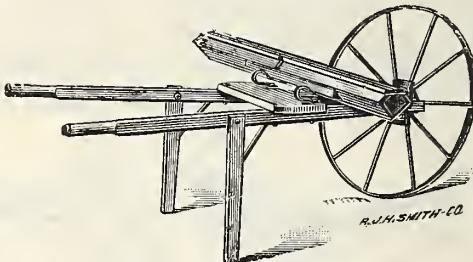
Cyclone Seeder

Simple in construction and easy of operation; has automatic regulator and cut-off, and performs its work perfectly. It is practical. Price, \$1.75; by express.



CAHOON SEEDER

The best machine of the kind in the market. The grain is held in a tight sheet-iron hopper surrounded by a bag which will hold a bushel of seed. Price, \$3.75; by express.



MICHIGAN WHEELBARROW SEEDER

It is the original of its kind, and is the result of 30 years' experience in the seeder business. It has all the good qualities that any other seeder has, and many superior ones.

Saves seed labor and insures an even catch.

The Springs: One of the latest improvements is the placing of springs under the seed box. These prevent loss of seed from jarring when machine is used on frozen or rough ground. They also cause the machine to run easier, on the same principle that a spring wagon runs easier than one without springs.

The Wheel: We use a steel wheel, built bracing like a bicycle wheel. They are 30 inches in diameter and the tire is 1½ inches wide. They are also reversible and all wear is easily taken up. There is but little strain on our wheels for the feed motion is taken from the hub instead of from the spokes.

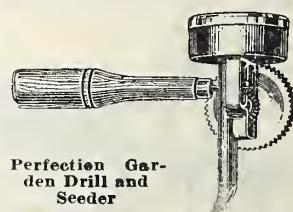
The Feed Rolls: Our feed roll has a steel center with waterproof coating. They have a positive motion their entire length and are not affected by the weather. They never require any changing or adjustment.

Order THE MICHIGAN and You Will Get the Best, a Seeder That Will Sow Both Heavy and Chaffy Seeds. Price: No. 22—12 ft., \$9.00; No. 24—14-ft., \$10.00; No. 25—14-ft., \$10.75.

Here is a time and labor saver adapted for all kinds of small garden seeds. It is alike useful in home gardens or hothouses. The Perfection Drill and Seeder is simple, practical and rapid in operation.

The seed is sowed at just the right depth—at the proper equal distances apart—and with the correct amount of seed in each spot.

This handy tool is as much ahead of hand sowing as a corn planter is ahead of planting corn by hand. Price \$2.00, postpaid; by express, \$1.85.



Perfection Gar-
den Drill and
Seeder



WATERS' TREE PRUNERS

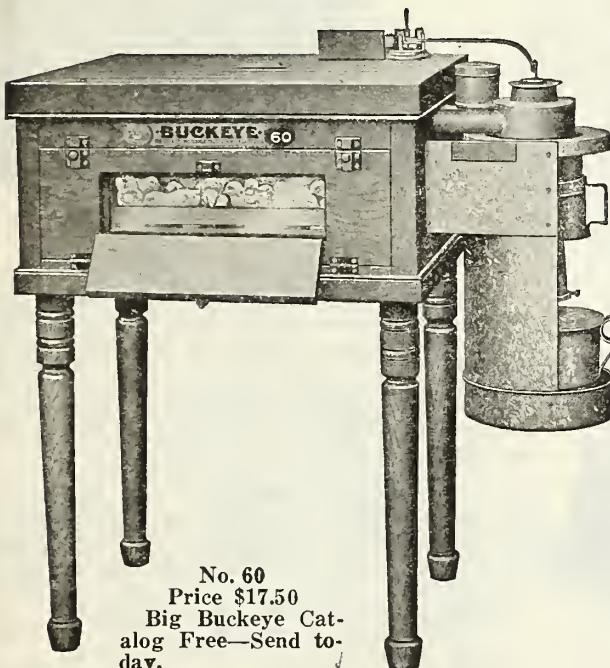
Has cast steel single blade. Wood pole, 8-foot handle, \$3.60; 10-foot \$3.90; by express.

POULTRY SUPPLIES

Buckeye Incubators Sold on 40 Days' Trial

WITH AN ABSOLUTE GUARANTEE TO HATCH EVERY HATCHABLE EGG

"THE BEST INCUBATOR MADE"



No. 60
Price \$17.50
Big Buckeye Catalog Free—Send today.

The name "Buckeye" represents "service"—and when we talk to you about Buckeye incubators, we do not refer to the wood and metal of which the machine is constructed, but to the "service" we guarantee the incubator to give.

Over four hundred thousand (400,000) satisfied users represent the proof that we offer in support of Buckeye superiority—little breeders, big breeders, beginners, experts—breeders that include every class from boys and girls with a little 60-egg machine—up to the tremendous poultry plants with capacities of 50,000 eggs and more—all uniting in the same verdict.

It is no longer considered a feat to build an incubator that will hatch "some" chickens from "some" of the eggs placed in it (there are many such incubators on the market), but the truly successful incubator is the MACHINE THAT WILL HATCH A CHICKEN FROM EVERY HATCHABLE EGG—the vigorous kind of chicks that start to grow the moment they are hatched, and continue to grow without forcing or doctoring.

THAT'S THE KIND OF HATCHES THE BUCKEYE PRODUCES, and has been producing for twenty-five years. That's why we have been able to sell over four hundred thousand Buckeyes to all kinds of people.

THIS IS A GUARANTEE THAT MEANS SOMETHING

The Buckeye is GUARANTEED to hatch MORE CHICKS and STRONGER CHICKS than any other incubator.

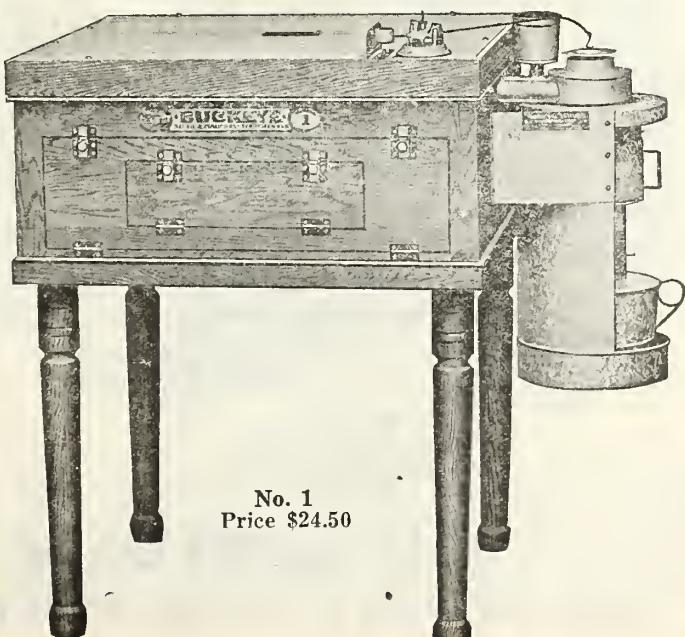
It is further guaranteed:

To require no artificial moisture. To operate satisfactorily in any temperature down to freezing, and to require no attention to the regulator from the time a hatch is started until it is finished.

The perfect construction of all its mechanical parts is also guaranteed, and any Incubator or part thereof that does not fulfill our guarantee in every particular, will be replaced without question any time within 40 days.

BUCKEYE PRICE LIST

No. 14, Style E—	
Capacity 60 eggs.....	\$10.50
No. 15, Style H—	
Capacity 60 eggs.....	14.50
No. 16, Style E—	
Capacity 110 eggs.....	18.50
No. 17, Style E—	
Capacity 200 eggs.....	24.50
No. 60, Standard—	
Capacity 60 eggs.....	17.50
No. 1, Standard—	
Capacity 110 eggs.....	24.50
No. 2, Standard—	
Capacity 175 eggs.....	29.50
No. 3, Standard—	
Capacity 250 eggs.....	39.50
No. 4, Standard—	
Capacity 350 eggs.....	47.00
No. 5, Standard—	
Capacity 600 eggs.....	70.00



No. 1
Price \$24.50

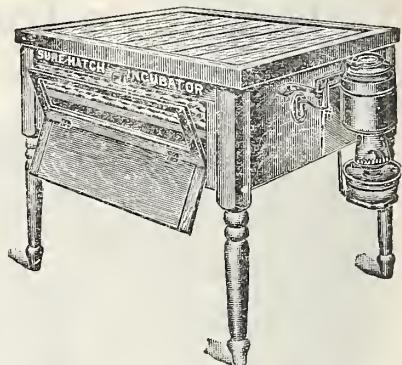
Our Guarantee puts it strictly "up to the Incubator"

Poultry Supplies—Continued

SURE HATCH INCUBATOR

The best hatcher built for the money. For the past several years we have had more or less calls for a medium priced incubator, but as we will not sell a thing that we cannot guarantee it took us a long time to find one that measured up to the specifications desired. We had our eyes on one a long time before we could get the agency. We have known for a long time that the SURE HATCH is the best incubator built for the money, but this is the first year we could get the agency, so we offer you now the SURE HATCH INCUBATOR, believing that if you buy one you will be well pleased.

The sides and ends of the Sure Hatch incubators are made with two distinct walls of redwood. The space between these two walls is air-tight to provide a dead air space for insulation.



Placing Lamp in Position

The heating is done with the hot water system. The tank and the heater are both made of the best Pure Lake copper, which will last many years. An incubator to be of good service must have a strong heating devise to warm the machine to the proper temperature during the cold weather, which is the most profitable time for setting the machine.

PRICES

No. 100, 100 to 120 Egg, Complete with all Fixtures	\$16.75
No 150, 150 to 170 Egg, Complete with all Fixtures	22.50
No. 200, 200 to 220 Egg, Complete with all Fixtures	25.50
No. 250, 200 to 220 Egg, Complete with all Fixtures	27.00

“BUCKEYE” PORTABLE BROODERS The Oil-Burning Brooders

With All the Desirable Features of the Modern Coal Burner

GUARANTEED to be absolutely free from all gases or odors and to provide a circulation of pure, fresh air every minute in the day.

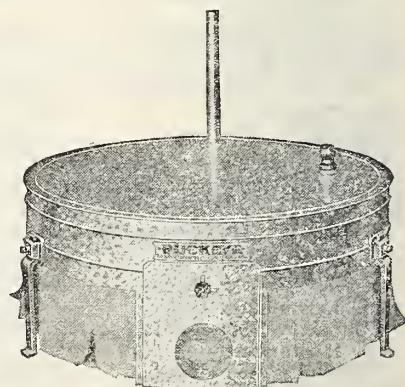
GUARANTEED to raise more chicks and bigger chicks than any other oil-burning brooder.

GUARANTEED to furnish an abundance of heat in any temperature down to freezing.

BUILT IN THREE SIZES

No. 20	No. 21
Diameter 19 Inches	Diameter 22 Inches
Capacity 60 Chicks	Capacity 100 Chicks
\$7.50	\$9.50

No. 22
Diameter 30 Inches
Capacity 150 Chicks
\$12.50



Sold on 30 Days' Approval

and You Write Your Own MONEY-BACK GUARANTEE

Poultry Supplies—Continued

The Standard Colony Brooder

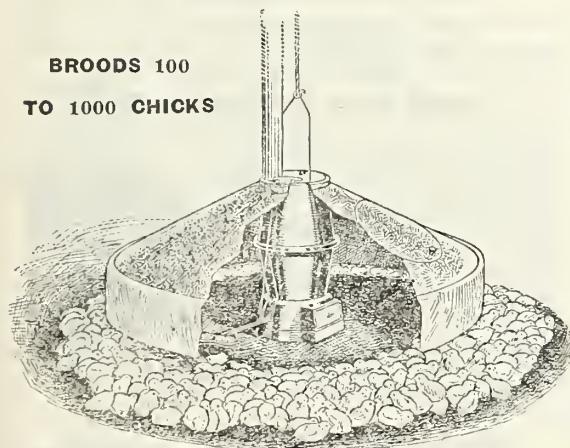
(Patented July 4, 1916)

THE MOST REMARKABLE COAL BURNING BROODER EVER INVENTED

Self-Feeding, Self-Regulating, Simple, Safe, Everlasting

GUARANTEED OPERATING COST LESS THAN SIX CENTS A DAY

BROODS 100
TO 1000 CHICKS

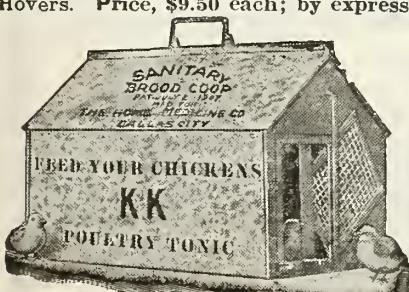


Showing a Standard Colony Brooder in Operation With 1050 Chicks.

This year for the first time we are enabled to offer this Brooder in two sizes. They are exactly alike. The small one works just as satisfactorily as the large one. Price: No. 18, hovers 50 to 500 chicks, \$17.50; No. 19, hovers 100 to 1,000 chicks, \$21.50.

International Sanitary Hovers

The International Sanitary Hovers have stood every climatic test from Panama to Quebec. Practical Poultrymen, state experiment stations, and poultry judges endorse them. You can raise chicks anywhere with International Sanitary Hovers. No specially constructed houses are necessary. There is no place better than in your regular hen houses. Sanitary Hovers are as practical for the small back-yard poultry raiser as for the large poultry forms. They are ready for business wherever placed. No crowding or smothering chicks—no kneeling in mud to get at the lamp. You want the best brooding device—you will get it in the Sanitary Hovers. Price, \$9.50 each; by express or freight.



Makes Three Chickens Grow where One Grew Before.

Cuts the Cost of Equipment to Less Than Half.

Cuts the Cost of Operation to Less Than Half.

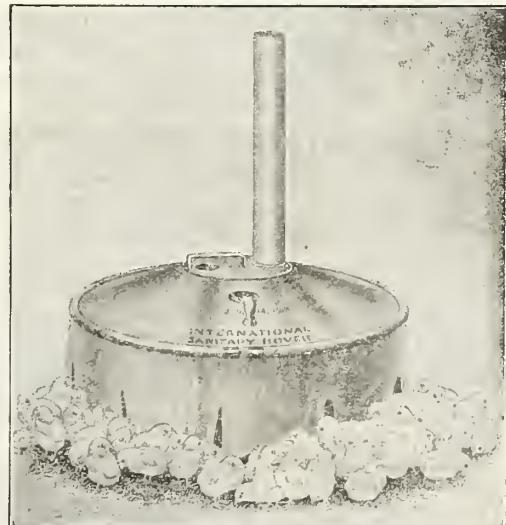
Reduces the Time and Labor to Less Than a Fourth.

Guaranteed to Raise More Chicks and Better Chicks.

Nothing to Break. Nothing to Wear Out.

This type of brooder can be satisfactorily operated in any locality or under any conditions. The especially built coal-burning stove for brooding purposes is self-regulating. The whole apparatus has one adjustable nut and not even a thermometer is necessary. It burns hard coal, is self-feeding and is guaranteed to run more than 24 hours in any weather on one filling of coal at an average cost of less than 6¢ per day. The coal is poured in at the stop of the stove. It is fire-proof, and is so simple that a boy or girl can operate it.

The air is always pure and fresh. There is no damper or valve of any kind between the smoke stake and the fire draft. It is controlled by an ingenious device that makes them unnecessary. The fresh air is provided by the automatic action of the draft on the stove.



International Sanitary Hover

SANITARY BROOD COOP

Made of galvanized iron, it is mite, rat, weasel, mink and skunk proof. It can be taken down and put up in 40 seconds, the bottom can be removed for cleaning without taking the coop apart. It has three doors hung on one pivot; the first a slat door which lets the chicks out; the second, of one-half inch wire netting, for use on hot nights; the third is of solid iron for cold and stormy weather. The coop is well ventilated but is entirely rainproof. It is approximately 18x24 inches square and 16 inches high. It can be carried with one hand to any convenient location. Price, each \$2.50; 6 for \$14.00; by express.

Poultry Supplies--Continued

O. K. CHICK FOUNTAIN



This fountain is galvanized throughout, and consists of two parts—a conical top which holds the water, and a fluted pan forming the base. This pan is seamless, being made from a disc of steel stamped into shape with dies.

The little "pockets" around the pan are large enough for the chicks to drink out of them nicely, but too small to allow a chick to get into them and get wet.

One pint size.....	.20c
Shipping weight 1 lb.	

One quart size.....	.30c
Shipping weight 2 lbs.	

DROP BOTTOM FOUNTAIN

In this style of Drinking Fountain the pan which forms the trough from which the fowls drink is hinged at the back and fastened by a brass latch in front. The hood over the trough prevents falling dust and dirt from getting into the water; and when the bottom is turned back the inside of the fountain can be easily cleaned out and kept in sanitary condition



The hole which allows the water to run from the fountain into the trough is behind the brass latch, which prevents the water from slopping out when the fountain is handled.

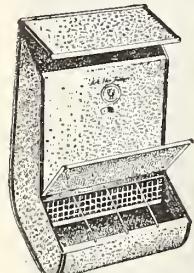
The hinge is made with a brass rod to prevent rusting. Made of No. 28 galvanized steel in three sizes.

2-quart Drop Bottom Fountain.....	\$0.75
Shipping weight 2 lbs.	
1-gallon Drop Bottom Fountain.....	\$0.90
Shipping weight 5 lbs.	

2-gallon Drop Bottom Fountain.....	\$1.20
Shipping weight 3 lbs.	

THREE-COMPARTMENT FEED HOPPERS

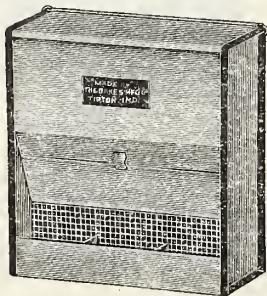
Substantially made of galvanized iron with three compartments. The large one holding about 4 quarts, and the smaller one about 2 quarts. Both the Hopper and the Trough have hinged lids, making it rat, mouse and dust proof when closed. Used either for dry mash or for oyster shell and grit, for old or young fowls. Rat and Mice Proof—No Waste. Price (shipping weight, 9 lbs. each)..... \$1.50



RECTANGULAR CHICK FEED HOPPER

This hopper is designed for young chicks, and made to either stand on the floor or ground, or hang against the wall. It is divided into three equal compartments, holding about four quarts altogether. Made of galvanized iron with hinged lid to both hopper and trough.

Price, each .....	.75c
Shipping weight 3½ lbs.	



CHICK FEED TROUGH

These troughs are very convenient for feeding flocks of growing chicks.

The trough is made on a half circle so that every bit of feed can be easily eaten out of it.



Made in two sizes, 10-inch and 20-inch	
10-inch trough with grate.....	.35c
Shipping weight 1½ lbs.	
20-inch trough with grate.....	.50c
Shipping weight 2 lbs.	

CHICK GRIT AND SHELL BOX

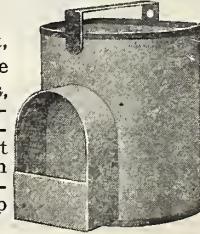
Growing chicks should have grit, oyster shell and charcoal always before them; and for this purpose our Chick Grit and Shell Box is indispensable. It is made of galvanized steel with three compartments. Height 7½ inches; width 6 inches; depth (front to back), 4 inches at bottom and 2 inches at top.

Price (shipping weight, 2 lbs.)
35c. Large size for grown fowls (shipping weight 4 lbs.)
70c.



WALL FOUNTAINS

Made in three sizes, 1 quart, 1 gallon and 2 gallons. The two larger sizes have flat backs, so they can be placed horizontally on the ground for filling and also to make them rest firmly against the wall when hung up. Made of No. 28 galvanized steel with heavy strap handles and hangers.



1-quart size.....	\$0.50
Shipping weight 1 lb.	
1-gallon size.....	\$0.80
Shipping weight 3 lbs.	
2-gallon size.....	\$1.10
Shipping weight 5 lbs.	

THE HANDY DRY MASH HOPPER

The Handy Hopper is made considerably wider at the bottom than at the top, so that it is impossible for any sort of dry mash to clog in it. Feed put in this Hopper cannot be wasted for the trough is deep, has a wide flange all around it, and solid partitions, making it impossible for the fowls to pile up the feed and throw it out with their bills.

PRICE LIST

No. 1 Handy Hopper, 9 inches long, one compartment.....	\$1.30
Shipping weight in fibre carton 6 lbs.	
No. 2 Handy Hopper, 15 inches long, one compartment.....	\$2.00
Shipping weight in fibre carton, 9 lbs.	
No. 3 Handy Hopper, 24 inches long, two compartments.....	\$2.50
Shipping weight in fibre carton, 12 lbs.	
No. 4 Handy Hopper, 36 inches long, two compartments.....	\$3.25
Shipping weight, crated, 17 lbs.	

Poultry Supplies--Continued

AUTOMATIC FEEDER AND FOUNTAIN

Feeds water, grain, grit, etc., automatically. Is easy to fill and operate. Just lift trigger, as shown in cut, which releases pan, clip remaining on jar, leaving pan without any obstruction, affording easy cleaning. Thus a sanitary fountain. Made to fit any Mason jar. We do not furnish jars. Price, postpaid, 25c; not postpaid, 20c each. Two for 45c postpaid; not postpaid, two for 35c; per dozen, postpaid, \$2.00; not postpaid, \$1.50.



NO. 32 HAND GRINDING MILL

In this mill are embodied all the good features of other hand grinding mills, to which have been added universal burrs or grinding plates that are adjustable for grinding coarse or fine. This machine grinds oats, barley, rye, corn, peas, dry bone, shells, etc., for feeding to poultry. It is a well designed machine, is strong and well made throughout and of excellent finish, has a 16-inch fly wheel, and is light running. The capacity of this mill is not equalled by any other of the same size. Shipping weight 40 lbs. Capacity, 1 to 2 bushels per hour. Price, \$4.25.



SPIRAL CELLULOID LEG BANDS

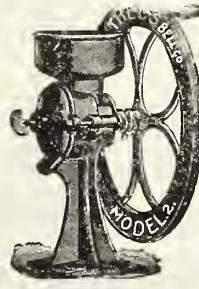
Ten colors, blue, red, yellow, green, white, violet, pink, orange, cerise, black. Poultry size. Any color. Be sure to state breed and sex. Price, postpaid: 12 for 20c; 25 for 30c; 50 for 50c; 100 for 85c; 500 for \$3.00; 1,000 for \$5.25.

For Pigeons and Baby Chicks—
Price, postpaid: 12 for 15c; 25 for 25c; 50 for 40 cents; 100 for 65c; 500 for \$2.75; 1,000 for \$4.50.



STEARNS'S BONE CUTTER

It has automatic feed; is self-cleaning; is the fastest fine cutting machine on the market; will stand more wear and tear; is least liable to get out of order; is the Only Bone Cutter that will not clog with gristle or meat. Price, \$12.00. Write for prices of larger sizes.



Model Mill



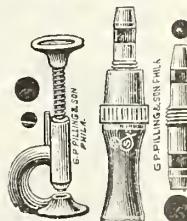
POULTRY PUNCH

This little tool is for marking poultry by punching through the web between the toes. It is light and handy to carry in the pocket. Nickel plated. Priced 40c; postpaid.



LEADER ADJUSTABLE LEG BANDS

Doz. 20c; 25 for 30c; 50 for 50c; 100 for 85c; postpaid.



POULTRY REMEDIES

Either kind, 35c; postpaid.

Each article must satisfy or you receive your money back
Send 4c to pay postage, and get Big 50c Remedy Book Free

Prices Postpaid	Lice Powder (small).....	\$0.30
	Lice Liquid (1 quart).....	.50
	Laying Tonic.....	.30
	Laying Tonic.....	.60
	Fly Knocker (1 quart).....	.50
	Lice Liquid ($\frac{1}{2}$ gallon).....	.75
	Lice Liquid (1 gallon).....	1.25
	Fly Knocker ($\frac{1}{2}$ gallon).....	.75
	Fly Knocker (1 gallon).....	1.25

By Exp. Collect

Roup Cure

Lice Powder (small).....

Lice Liquid (1 quart).....

Laying Tonic.....

.50

Roup Cure

.30

Bronchitis Remedy

.60

White Diarrhoea Remedy

.30

Cholera Remedy

.30

Cholera Remedy

.60

Poultry Tonic

.30

Head Lice Ointment

.15

Head Lice Ointment

.30

Fly Knocker (1 gallon).....

.75

Fly Knocker ($\frac{1}{2}$ gallon).....

.75

Fly Knocker (1 quart).....

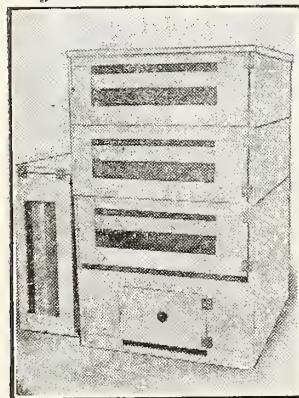
1.25

By Exp. Collect



Poultry Supplies---Continued

THE COLFAX ALL-METAL SPROUTER



Buil' in Sections—Add Sections as your Flock Increases. Two Base Units. Small Base, $\frac{1}{4}$ bu., 2 trays, 25-35 hens. Small Section, $\frac{1}{4}$ bu., 2 trays, 25-35 hens. Large Base, 1 bu., 2 trays, 100-150 hens. Large Section, 1 bu., 2 trays, 100-150 hens.

DOUBLE QUICK GRAIN SPROUTER

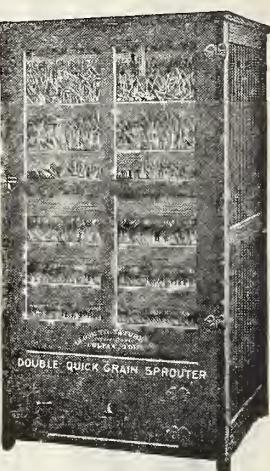
THE PERPETUAL POULTRY SILO

The Grain Sprouter Doubles the Egg Yield—Cuts in Half the Feed Bill—Sprouts in 24 hours and forces growths of 1 to 2 inches daily—Sprouted Oats for Winter Eggs.

The most useful invention in the poultry industry since that of the incubator is the **Grain Sprouter**. Recent scientific research in the feeding of poultry has developed the fact that for prolific egg production there is no feed that compares with the sprouted grains. The newly germinated grains for growing chicks and the sprouted oats for laying hens are producing most remarkable results.

Double Quick

No. 1.....	\$ 8.00	Colfax Metal
No. 2.....	9.75	Small Base..... \$ 8.00
No. 3.....	15.00	Small Section..... 3.50
No. 4.....	19.75	Large Base..... 16.00
No. 5.....	29.00	Large Section..... 7.50
No. 6.....	44.00	



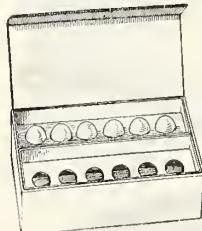
The First, the Original, the Pioneer. Six Sizes, $\frac{1}{4}$ bu. to 8 bu.—a few hens to 800

NON-BUSTO ELASTIC EGG CARRIER

THE MOST SENSATIONAL IMPROVEMENT IN EGG CARRIERS EVER MADE

For Parcel Post or Express Shipments of Commercial or Hatching Eggs.

For the first time in history it is made practical to ship eggs by Parcel Post with perfect safety—and yet at a cost so low to show a profit to the shipper. Your egg-shipping problems are solved at last. You will see at a glance that this is the simplest, safest egg carrier ever thought of. Complete with filler and 2-color gummed label. Eggs suspended vertically in air cushions.

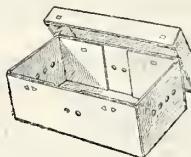


EFFICIENCY BABY CHICK CARRIERS

Top and bottom one piece each; shipped flat; put together by brass braids, no glue nor tape needed.

Weights Price

Sizes	Dimensions	Dozen	Dozen
25 Chicks....	$1\frac{3}{8} \times 8 \times 5\frac{1}{2}$ in.	11 lbs.	\$ 1.20
50 Chicks....	$1\frac{3}{8} \times 14 \times 5\frac{1}{2}$ in.	18 lbs.	1.70
100 Chicks....	$2\frac{1}{8} \times 15 \times 5\frac{1}{2}$ in.	30 lbs.	2.90



EFFICIENCY KOOPS "Without a Nail"

For shipping breeding birds. Lightness makes great saving in express charges. Collapsible and easily stored. Put together with steel rods saving time and labor. Can be used over and over.

Weights Prices

Sizes	Dimensions	Dozen	Each
Pet (Pigeons, Bantams, Puppies, etc)....	$22\frac{1}{8} \times 13\frac{1}{8} \times 12$	72	\$ 0.50
Single, 1 to 3 birds	$22\frac{1}{8} \times 13\frac{1}{8} \times 24$	82	.55
Double, 2 to 4 birds	$22\frac{1}{8} \times 19\frac{1}{8} \times 24$	106	.75
Pen, 5 to 7 birds....	$22\frac{1}{8} \times 23\frac{1}{8} \times 24$	128	.85

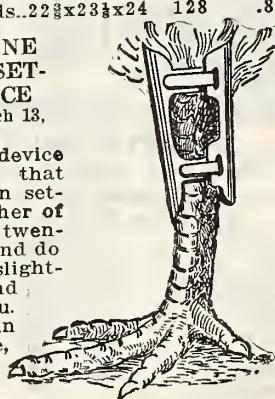


THE HUMANE ANTI-HEN-SETTING DEVICE

(Patented March 13, 1917.)

The only device ever invented that will stop a hen setting and cure her of broodiness in twenty-four hours and do it without the slightest pain or suffering for the hen, and no wasted time or trouble for you.

Clasp on leg and let the hen run free for 24 hours, then remove. Price, 10c each; 1 doz. \$1.10; postpaid.



Banner Root Cutter
Cuts roots and Vegetables for Poultry.



PRICE \$6.00.

Lincoln Brand Poultry Feeds

Our Lincoln Brand Poultry Feeds are economical to use because they contain only good clean seeds and grains mixed in the proper proportions to make balanced rations for your birds at every age. That will help your baby chicks grow rapidly, developing strong constitutions and grow into splendid pullets and cockerels. For full grown stock you must supply feeds that will not only nourish their bodies but also enable them to lay eggs. Corn alone makes fat, but very few eggs. The formulas used in our poultry feed mixtures are recommended by the Poultry Department of the Nebraska State Experiment Station.



LINCOLN BRAND CHICK FEED

This feed we placed on the market several years ago and our trade has continually increased until we now sell it in car load lots. This feed is made of the sweetest, purest and cleanest cracked grain and seeds of a uniform size and mixed in the proper proportions for the best results for small chickens. The grains we use in this mixture cost more than are ordinarily used as they are specially cracked and cleaned. Feed this for the first few weeks. Always give your chickens plenty of fresh water. 5 lbs. 25c; 50 lbs. \$2.25; 100 lbs. \$4.25.

BUTTERMILK STARTING FOOD

A ready prepared food for baby chicks, composed of hulled oats, wheat middlings, wheat, corn, prepared Buttermilk, bone, iron sulphate, gentian root and prepared mustard proportion. Buttermilk Starting Food supplies Buttermilk to the chicks in dry form with only the water eliminated. Supplies all the needs of the chick—except for grit and fine drinking water—until one week old; then add green food. In the second week begin supplying animal food, also Lincoln Brand Chick Feed in litter to induce exercise and gradually prepare the chicks for the change in feed later on. Feed Buttermilk Starting Food by mixing with small amount of water until crumbly but not pasty or sloppy. 2½ lbs. 25c; 6 lbs. 50c; 13 lbs. \$1.00; 100 lbs. \$7.00.

MEAT SCRAPS

For laying hens may be mixed one part meal scraps to three parts crushed grain, bran or shorts. Wet with hot water, or skimmed milk, preferred. Feed night and morning. 4 lbs. 25c; 50 lbs. \$3.25; 100 lbs. \$6.00.

BLOOD MEAL

This is pure, rich, dried blood. Very fine for incubator chicks, as it prevents loss from breaking down or leg weakness. Good to start hens laying. Feed one part blood meal to fifteen parts of mash. 3 lbs. 25c; 50 lbs. \$3.90; 100 lbs. \$7.50.

LINCOLN BRAND LAYING MASH

A high protein mash for laying hens. It consists of six or eight ground grains with a good proportion of meat scraps mixed in the right proportions for the best results. It is the finest mixture we can prepare regardless of price. Is highly recommended by the State Poultry Experiment Station. Should be fed in connection with the Lincoln Brand Scratch Feed and kept before them in a hopper of easy access at all times. Be sure and give your laying hens plenty of fresh water. Six lbs. 25c; 50 lbs. \$2.00; 100 lbs. \$3.80.

BIRD SEED, ETC.

We Carry a Complete Stock of Clean, Pure Bird Seed

CANARY (Sicily)

Superior to all other varieties. 1 lb. 25c; 2 lbs. 45c; postpaid. 1 lb. 20c; 2 lbs. 35c; by express.

RAPE

Very desirable to furnish variety. 1 lb. 20c 2 lbs. 35c; by express. 1 lb. 30c; 2 lbs. 55c; postpaid.

HEMP, RUSSIAN

A very rich, oily seed, much liked by all birds. Should be fed sparingly, as it fattens the bird and injures the song. 1 lb. 25c; 2 lbs. 45c; postpaid. 1 lb. 15c; 2 lbs. 25c; by express.

MIXED SEED FOR CANARIES

All clean, plump seed, in the proportions called for by experienced bird fanciers. 1 lb. 20c; 4 lbs. 65c; 9 lbs. \$1.35; postpaid. 1 lb. 15c; 4 lbs. 50c; by express.

ALL PRICES ON THIS PAGE SUBJECT TO CHANGE

LINCOLN BRAND DEVELOPING FEED

Has no equal for growing chickens. It is a mixture of small and crackled grains and seeds mixed in the proper proportions for the most rapid growth of poultry. Should be fed as soon as chicks get too large to feed Lincoln Brand Chick Feed. 6 lbs. 25c; 50 lbs. \$2.10; 100 lbs. \$4.05.

CRYSTAL GRIT

Not only your large fowls, but your small chickens must have grit. Most so-called chicken cholera is simply indigestion caused by lack of grit with which to grind the food. Large, medium and chick: 15 lbs. 25c; 50 lbs. 75c; 100 lbs. \$1.15.

CRYS-CO



A shell producer and grit in one. It is the crystallized molluscan shell formation or petrified shell, nature's own product, and is mined and crushed coarse, medium and fine for the great American hen. 17 lbs. 25c; 50 lbs. 50c; 100 lbs. 85c.

CRUSHED SHELLS

If you expect your hens to lay eggs you must furnish them with something to make shell. 17 lbs. 25c; 50 lbs. 50c. Clam shells, 75c per 100 lbs.; Oyster shells, 95c per 100 lbs.

POULTRY BONE

Should be kept before poultry of all classes, at all times, especially where egg production is desired. They will be the best judges as to the amount they want. Young chickens should be permitted to get it at their pleasure. Large, medium chick and meal. 3½ lbs. 25c; 50 lbs. \$2.50; 100 lbs. \$4.95.

CHARCOAL

This is a most excellent ingredient to mix with mash. 10c per lb.; 4 lbs. 25c; 50 lbs. \$2.25; 100 lbs. \$4.00.



LINCOLN BRAND SCRATCH FEED

This can be used to follow Lincoln Brand Developing Feed. It consists of eight to twelve different kinds of seeds and grains. It contains no oyster shell or grit, no waste material. The fowl always finds something tempting for which to scratch. Keep the hens busy with Lincoln Brand Feeds and you will not lack eggs. 6 lbs. 25c; 50 lbs. \$2.10; 100 lbs. \$4.05.

MAMMOTH RUSSIAN SUNFLOWER

Most important food for parrots. Very nutritious and is liked by all large seed-eating birds. By freight: 1 lb. 15c; 2 lbs. 25c; 11 lbs. \$1.00; 50 lbs. \$4.50; 100 lbs. \$8.50. 1 lb. 20c; 3 lbs. 45c; postpaid.

CUTTLE BONE

Important for canaries, parrots, an all seed-eating birds. 2 for 5c. Postpaid: 4c each; 45c per dozen.

SONG RESTORER

It restores to their natural notes, birds which have lost their song from exposure to cold or excessive moulting. The use of one box will bring good results. Use in connection with their daily food. 25c postpaid. 15c each not postpaid.

WE SELL CANARY BIRDS—WRITE FOR PRICES.



Miscellaneous Supplies



BLATCHFORD CALVES

Over 650,000 calves were raised last year on Blatchford's Calf Meal in the United States and Canada, according to carefully computed figures.

This proves again that most of the farmers and breeders are fully alive to their own best interests.

Blatchford's Calf Meal is not an ordinary "feed" or "meal" to be fed indiscriminately; it is a highly concentrated, smooth milk-equal, to be fed with care.

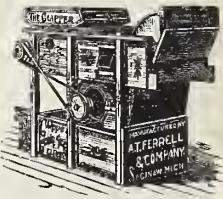
Blatchford's Calf Meal is for calves what Mel-lin's Food is for babies. Raises the finest calves at about half the cost of milk. Prevents scouring. Try a bag on our guarantee. Price, 100 lbs. \$5.45; 50 lbs. \$2.75; 25 lbs. \$1.50.

CALF DEHORNER

This comes in the shape of a pencil and is very easily applied. Clip off the hair around the little horn at the time it feels like a button and before it starts through the skin. Dampen it a little with water, and rub it with the Dehorner material. This causes the horn to stop growing, and should be applied when the calf is from 5 to 10 days old. Enough for 25 or 30 calves, price 50c; postpaid.

CLIPPER FANNING MILLS

This is the small size of the fanning mill and seed separator used by all seedsmen. It will separate small seed from large, take out light seed, straw and weeds all at one time. Is equipped with ten screens, will fan all kinds of grain seed. Send for large catalog of fanning mills. Price, complete, No. 1, \$30.00; No. 2, \$40.00.



NICKEL PLATED MILKING TUBES

Use for sore and obstructed teats and hard milking cows. 2-inch, 2½-inch, 3-inch long. Price 35c each postpaid.

A SCIENTIFIC TRIUMPH



7c each; 6 for 35c;
5c each.

Lice Killer and Nest Eggs combined in one — effective, lasting, non-expensive.

Superior to others in form, size and appearance. They look exactly like natural eggs. Just the thing for laying hens. Price, postpaid. By express,

PORCELAIN NEST EGGS

Made of Flint Glass. 6 for 25c; postpaid. By express, 40c dozen.

MILKOLINE

PURE CONDENSED BUTTERMILK FEED PLUS HEALTH

Here's the Greatest Profit-Maker Ever Offered the Poultry Raiser, Feeder and Packer.

MILKOLINE is a scientific product which eliminates every objection to the use of raw buttermilk, cuts the cost to a mere trifle, includes invaluable medicinal qualities of the best grade buttermilk and is of the same uniform quality in winter or summer, in the far north or the extreme south.

MILKOLINE is simply pure, fresh buttermilk condensed and modified—one gallon equaling 50 gallons of the best buttermilk; retaining food values and acidity without the useless bulk. It is so prepared that it will keep indefinitely in any climate and will not mould, rot or sour.

MILKOLINE has proven its great worth to thousands of poultrymen—including the very largest institutions in America. Their repeat orders month after month and their statements that they would not be without **MILKOLINE** is proof that our product is what we claim it to be.

PRICES

	Per Gal.
10 Gallon Kegs.....	\$1.10
5 Gallon Kegs.....	1.25
1 Gallon Kegs.....	1.50
1 Quart .....	.50

ALL ABOVE GOODS BY FREIGHT OR EXPRESS UNLESS POSTPAID
PRICES ARE GIVEN. PRICES SUBJECT TO CHANGE.

High Grade Fertilizer and Lawn Dressing



NITRACO has been evolved after years of study of the Fertilizer business and the demands of the gardening public, and is designed to be the most perfect and complete Fertilizer placed upon the market. It is so compounded that it may be termed the "Universal Fertilizer" and can be applied with safety to any soil in any climate, to "ANYTHING THAT GROWS." The only precaution that is necessary is in the quantity to be applied, and this is set forth in our circulars and on the bags, cartons, etc. Care, however, should be exercised to never heavily increase the quantities stated, but rather to apply often and regularly once a month, and upon strong growing plants every two weeks. NITRACO is packed in 1-lb. and 5-lb. cartons or 5-lb., 10-lb., 25-lb., 50 lb. and 100 lb. heavy drill and burlap bags, and is sold at the following prices: Analysis; Ammonia 4 per cent, phosphoric acid 8 per cent, potash, 2 per cent.

1 lb. carton, postpaid.....	\$0.25
5 lb. carton postpaid.....	.75
10 lb. bags, not postpaid.....	1.25
25 lb. bags, not postpaid.....	2.50
50 lb. bags, not postpaid.....	4.50
100 lb. bags not postpaid.....	6.00

SWARD FOOD is a Top Dressing prepared to feed the grasses and insure a thick and matted growth of rootlets, resulting in a compact and velvety turf. It also acts as a preventative and destroyer of the Antler or Grass Moth, and contains in soluble form the organic requisites for the healthy and luxuriant growth of all varieties of grasses. Don't cover your lawn with unsightly and offensive stable manure.

TO REVIVE OLD GRASS AROUND THE HOUSE—
Rake off the dead grass and scratch the ground with an iron-tooth rake. If there are any bare places, sprinkle in a little mixed grass or lawn seed then roll or tread spots. Apply a light dressing of "Sward Food" occasionally. Approximate quantity to be used: For say 2,000 square feet, 25 lbs; per acre, 600 to 1,000 lbs. It is put up to suit the small front yard, the little flower bed, the garden patch, or the magnificent lawn: 5 lb. packages; 10 and 25 lb. bundles. Price, 5 lbs. 35c; 10 lbs. 70c; 25 lbs. \$1.60.

NITRATE OF SODA

THE UNIVERSAL TOP DRESSER

Analysis: Nitrogen 15 per cent; equal to Ammonia, 18 $\frac{1}{4}$ per cent

Quick in action; used for the nitrogen it contains. It creates rapid growth, is odorless, and entirely soluble. It should be applied only when the plants are above ground, usually in combination with other chemical fertilizers.

Nitrogen is the most important element in the production of plant life. When this has become exhausted from the soil, it must be replaced to again insure productivity.

Nitrate of Soda is the best form in which nitrogen can be restored to the soil. It is of special value for early crops such as Peas, Corn, Beets, Cabbage, etc., when rapid maturity is essential, and of great benefit to hay and forage crops, which are unable to obtain sufficient nitrogen from the soil when they most need it. Nitrate of Soda is a great stimulant for the production of Sugar

Beets, Potatoes and Sorghum, also small fruits that need a steady, even growth to promote uniform maturity. Price:

1 lb. tin.....	\$0.25	25 lb. bag.....	\$2.50
5 lb. bag.....	.75	50 lb. bag.....	5.00
10 lb. bag.....	1.25	100 lb. bag.....	7.50

STEAMED GROUND BONE

THE FINEST OF STEAMED BONE

Analysis: Ammonia 3 per cent, Bone Phosphate of Lime, 50 per cent

This is finely ground and of first quality; it starts to decompose quickly so results from its use are soon apparent but it does not dissolve so fast as most chemical fertilizers so it continues for a long period its improvement in the soil fertility; it is less likely than other fertilizers to leach or waste. With bone there is no danger of burning the plants. It contains 23 per cent Phosphoric Acid, one of the principal plant foods. Use 3 to 5 pounds of bone meal for each tree and vine when setting out, working it in well around the roots.

For New Lawns, use 500 lbs. of bone meal with a ton of sheep manure per acre. This should be plowed under or spaded in, several weeks before sowing the seed. Old lawns, top dress very early in Spring with sheep manure and bone meal mixed, at the rate of 2200 lbs. per acre or 50 lbs. per 1000 square feet.

Field and Garden Crops, $\frac{3}{4}$ to 1 ton broadcasted and harrowed in. This is especially desirable for use with sheep or cattle manure which is rich in nitrogen.

PERMANENT PASTURES AND MEADOWS

Use $\frac{1}{2}$ to 1 ton per acre before growth starts in the spring. This will stimulate the growth of the plants and result in improving the stand. Its effect will be apparent for several years. Price: 25 lbs. \$1.25; 50 lbs. \$2.25; 100 lbs. \$4.00

SHEEP MANURE

Analysis: Ammonia, 2.50 per cent; Phosphoric Acid, 1.50 per cent; Potash, 1.50 per cent.

This is a splendid, complete fertilizer containing the necessary plant foods and is also rich in humus, or vegetable matter. It is excellent for general use either alone or in combination with other special purpose fertilizers. Having been kiln dried, there is little danger from weed seeds. It can be used freely as it is not likely to burn anything. Part of it is very soluble so its effects are usually apparent soon after the application and for a long time afterwards. It is carefully selected, dried, pulverized and screened.

FOR LAWNS. Pulverized Sheep Manure is a fine fertilizer for the lawn. It should be applied by sprinkling lightly over the grass, much as one would sow grass seed, in the Spring and up to July 15th. It requires no raking in. The color is not conspicuous and there is no objectionable odor. This will nourish the grass, act as a mulch, and tend to prevent the lawn from burning in hot weather. Use 50 lbs. per 1000 square feet or 25 lbs. with 25 lbs. of bone meal. See note on bone meal.

FOR THE GARDEN. After the crop has been harvested in the Fall, the garden should be given a good coating of Sheep Manure. In the Spring put on another light coat and turn it under, or sow lightly in the rows.

FOR PUBLIC PARKS. Sheep Manure is used on some of the best public parts in this country, including the beautiful park system of Minneapolis.

FOR TRUCK GARDEN. Sheep Manure is a good fertilizer for the truck garden producing better and earlier crops of onions celery and other vegetables. Price, 1b. 5c; 5 lbs. 15c; 10 lbs. 25c; 25 lbs. 60c; 50 lbs. \$1.25; 100 lbs. \$2.00; 500 lbs. \$9.00; 1,000 lbs. \$18.50; ton \$32.00.

PRICE OF ALL FERTILIZER SUBJECT TO CHANGE

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Alfalfa	44	Collard	13	Grape Dust	103	Morning Glory	66	Sage	17	
Almond, Flowering	69	Collections	38	Grit	125	Mourning Bride	(See Scabiosa)	Salpiglossis	63	
Alisike	46	Convolvulus	66	Gypsophila	60-80	Mulberry	67	Salvia (Fl. Sage)	63	
Althea	69	Coreopsis	79	Grain Sprouters	124	Mushroom Sprawn.	18	Salsify	33	
Alyssum	57-79	Corn, Broom	56	Hardy Climbing Vines	73	Musk Melon	2-20-21	Sambucus	71	
Amaranthus	57	Corn, Field	50-51	Hardy Lillies	90	Mustard	18	Sansevieria Zeylanica	87	
Anemones	57	Corn, Saver Beet	41	Hardy Perennial Plants	79 to 83	Nasturtium	61-66	Scabios	64	
Anthirrhinum	57	Corn Salad	15	Hardy Shrubs	69-70-71	Nest Eggs	126	Scale Destroyer	104	
Ant Driver	100	Corn Planter	51	Hardy Roses	14-78	New Shaalu	54	Seed Drills	118	
Apples	92	Corn Sheller	51	Hedychium	91	Nicotina	61	Seed Tester	51	
Apricots	93	Corn, Sweet	14-15	Helianthus	51	Nigella	61	Sensitive Plant	63	
Aquilegia	79	Corn Tester	51	Helianthus (See Sunflower)	60	Nox-Em-All Gopher	Tables	Shells, Crushed	125	
Aralia Spiuosa	69	Cornus	70	Herbs	17	Nozzles	105	Shrubs	69-70-71	
Arborvitae, American	68	Cosmos	69	Hibiscus	80	Nursery Stock	99	Slug Shot	103	
Aristolochia	66	Cow Peas	43	Highbush Cranberry	72	Oats	67	Small Fruits	96-98	
Arsenate of Lead	104	Coxcom	59	Highland Mixture	48	Oak	25	Smilax	63-83	
Ash	67	Crab, Flowering	69	Hog Pasture Mixture	43	Okra	25	Schrock Kaffir	Sorghum	4
Asparagus	5	Crab Apples	93	Hollyhock	80	Oleanders	87	Soradragon (See Antirrhium)	63	
Asters	58-79	Cress	13	Honeysuckles	70-73	Onions	24-25	Snowball	72	
Baby's Breath (See Gypsophila)	57	Crinum Americanum	89	Horse Radish	18	Onion Sets	25	Snowberry	72	
Bachelors Buttons (See Centaurea)	60	Crys-Co	125	Hose Menders	100	Orchard Grass	47	Sop, Tobacco	104	
Balloon Vine	58	Cucumbers	16	Hothed	23	Oyster Shells	125	Song Restorer	125	
Balsam	66	Currants	96	House Plants	84-87	Oxalis	89	Sorghum	56	
Balsam Apple and Pear	66	Currant, Flowering	71	Hovers	121	Orange	85	Soy Beans	43	
Barberry	69	Cut Worm Killer	105	Iceland	45	Peonies	82	Speltz	56	
Barley	53	Cyclamen	59-87	Hose Menders	100	Pansies	62	Spinach	88	
Basket Materials	129	Cydonia Japonica	70	Hothed	23	Parsley	28	Spiraea	72	
Beans	67	Cypress Vine	66	House Plants	84-87	Parsnips	28	Sprayers	101-102-103	
Bedding Plants	84	Dahlia	88	Hovers	121	Passion Flower	66	Spray Mixtures	104	
Beekeeper's Supplies	106-114	Daisy, Shasta	79	Iceland	45	Peaches	93	Spruce	68	
Beets	2-8	Dandelion Killer	100	Humulus	66	Peanuts	28	Squash	32	
Begonias	84	Datura	59	Hyacinth Bean	93	Pears	93	Stocks	64	
Bignonia	73	Delphinium	59-80	(See Dolichos)	66	Peas	26-27	Stokesia Cyanea	80	
Billon Dollar Grass	49	Deutzia	70	Hydrangea	70	Peas, Field	43	Strawberries	98	
Birch	67	Dianthus	60-80	Ice Plant	80	Pencilaria	49	Sudan Grass	54	
Bird Seed	125	Dicentra Spectabilis	79	Implements	115-118	Peppers	28	Sugar Beets	42	
Blackberries	87	Digitals	80	Incuhatators	119	Perennial Seeds and Plants	79	Suitani	61	
Black Leaf	40,	Dill	17	Insecticides	104-105	Perfection Weeder	117	Sumac	71	
Bleeding Heart	79	Dimorphotheca An-	60	Iris	82	Summer Flowering bulbs	88-89	Summer Flowering		
Blood Meal	125	rantiaca	60	Iron Age Tools	115	Vinca	64-85	bulbs		
Blue Grass	47	Dolichos	66	Ivy	73-85	Pest Exterminators	105	Savory	17	
Bone, Poultry	125	Dogwood (ee Corn-	70	Jerusalem Corn	54	Petunia	62	Sunflower	61-125	
Bone Cutter	123	nns)	70	Johnson Grass	47	Phloxes	63-81	Sward Food	127	
Bordeaux Mixture	104	Drills	118	Juniper	68	Pinks (See Dian-	23	Sweet Clover	46	
Broadcast Seeders	118	Duster's	103	Kaffir Corn	54	thus)	23	Sweet Corn	2-14-15	
Broccoli	9	Egg Carrier	124	Kale, (Borecole)	18	Planting Table for	29	Sweet Peas	65	
Brooders	120-121	Egg, Nest	126	Lady's Mantle	125	Vegetables	1	Sweet Potatoes	29	
Brood Coop	121	Egg Plant	15	Lawn Fertilizer	127	Planet Jr. Tools	116	Sweet William	83	
Bromus Inermus	48	Evergreen Trees	68	Lawn Grass	99	Plant Food	129	Swiss Chard	8	
Broom Corn	56	European Bird	68	Lawn Hose	99	Plants, Vegetables	9-38	Sycamore	67	
Brugmangia	87	Elm	67	Lawn Sprinklers	100	Platycodon	80-83	Syringa (See Mock Orange)	71	
Brussels Sprouts	9	Endive	56	Lawn Sprinklers	100	Plums	94	Tamarix	72	
Buckwheat	53	English Rye Grass.	16	Lect	17	Plumbago Larpentae	80	Teosinte	55	
Buddleia	69	Escholtzia	48	Leg Bands	123	Polemonium	83	Thyme	17	
Bug Death	108	Everlasting Flowers	60	Lentils	18	Pop corn	15	Timothy	48	
Burning Star (See Lynchis)	81	Everbearing Ras'b'y	97	Lentils	18	Poplar	67	Tobacco	33	
Butterfly Flower (Schizanthus)	58	Everbearing Straw-	98	Lettuce	19	Poppies	63-83	Tobacco Dust	103	
Cabbage	10-11	berries	15	Lawn Fertilizer	127	Poppy, California	(See Escholtzia)	Tobacco Soap	104	
Calendula	58	Evergreen Trees	68	Lawn Grass	99	Portulaca (Rose)	120-122-123	Tomatoes	2, 34-35	
Caladium	58	European Bird	67	Lawn Hose	99	Moss)	62	Trinidad Dasheen	91	
Calf Meal	126	Cherry	67	Lawn Sprinklers	100	Potatoes	39-40	Tritoma	83	
Calliopsis	58	Fall Bulbs	91	Leek	17	Potato Planters	40	Trumpet Vine	73	
Calf Dehorner	126	Fanning Mill	126	Leg Bands	123	Potato Seed	40	Tulip Tree	67	
Campanula	79	Farmogerm	45	Lemon	55	Potato, Sweet	29	Tuberoses	89	
Canada Blue Grass	47	Feeders	122	Lentils	18	Poultry Remedies	123	Turnips	36	
Canary Bird Flower	66	Fertilizer	127	Lettuce	19	Poultry Supplies	123	Vegetable Plants	9-39	
Canary Seed	125	Feterita	55	Linden	56	Prunella	120-122-123	Verbena	64	
Cardinal Climber	66	Feverfew	60	Lobelia	61-81	Primula	62	Vetch	43	
Carnation	79-85	Flower Pots	91	Loucost	67	Privet	71	Vinca	64-85	
Carrot	12	Forget-Me-Not	83	Lowland Mixture	48	Rhubarb	120-122-123	Vines, Hardy	73	
Castor Bean (See Ricinus)	58	Four-O'Clock	60	Matricaria	61-83	Quince, Scar, Japan	70	Vines, Annual	65-66	
Charcoal	126	Forsythia	70	Monarda	61	Radishes	30-31	Violets	87	
Cherries	94	Foxglove	80	Marjoram, Sweet	17	Raffia	129	Vulgaris	72	
Chick Feed	125	Fruit Trees	92-93-94	Linum	68	Prunus Japonica	69	Wall Flower	64	
Chives	13	Fuchsias	95-96	Linden	67	Pull-Easy Cultiv'r	117	Walnut	67	
Chrysanthemum	59-80-84	Funkia	85	Lobelia	61-81	Pumpkins	29	Water Melon	22-23	
Cinnamon Vine	73	Garden Huckleberry	17	Loucost	67	Purple Fringe	71	Weed Killer	100	
		Garden Implements	59	Matricaria	61-83	Pyrethrum (See Golden Feather)	63-80-83	Weed Puller	100	
			115-116	Monarda	61-83			Weeders	117	
				Motherwort	89			Weeping Trees	67	
				Magic Weeder	117			Weigelia	72	
				Mangel Wurzel	41-42			Weights Farm Seed	49	
				Maple Trees	67			Whale Oil Soap	104	
				Marigold	61			Wheat	53	
				Marjoram, Sweet	17			White Clover	99	
				Matricaria	61-83			Wild Cucumber	66	
				Matrimony Vine	89			Willow	64	
				Meadow Fescue	47			Wistaria	67	
				Milkweed	117			Wandering Jew (See Tradescantia)	86	
				Milk Thistle	126			Xanthosoma	21	
				Milkweed	126			Yucca	83	
				Milk Thistle	126			Zinnia	64	
				Milk Thistle	126					



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A New Scientific Concentrated Fertilizer
For Potted Plants and Vegetables

Takes the place of liquid manure.
Used by dissolving in water. It starts the plants at once into healthy and vigorous growth and makes them bloom luxuriantly. Trial size box sufficient for 10 house plants for 3 months. **10c postpaid.** Regular size box, sufficient for 35 plants for 3 months, **25c postpaid.**

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Flowers are like people, their health depends upon their food. It must be nourishing, but not too rich to force growth and cause reaction. A chemically correct flower food for house plants. It has no odor whatever and can be used dry or dissolved in water for sprinkling. Use it and your flowers will flourish and their health

will last. Trial size (enough for 10 plants 6 months), **15c, postpaid.** Small size (feeds 25 plants for 6 months), **30c, postpaid.** Large size (enough for a year for 30 plants), **50c, postpaid.**

SPRAYING UNDER THE LEAVES KILLS THE INSECTS

A Cake of Tobacco Soap free with each Sprayer

**PRICE
50 C.**
FOR THE
ROSE BUSHES
AND
GARDEN PLANTS

Will reach Vines
ten feet high.
Just lovely for
the flower bed.
If you like flow-
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Sprayer.

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A mist like
spray cover-
ing every
part of the plant.

THE THING LONG NEEDED

Just what mother was long looking for.
Exce'lent for seeds newly sown they will
not wash out to the surface.

HAVE ONE COME WITH YOUR SEEDS

"RED SNAPPER" PLANT FOOD

This is an organic fertilizer containing absolutely no harmful chemicals or drugs of any kind or description. It is a nourishing, properly balanced food, and not simply a stimulant, and is the richest, most nutritious, and yet harmless fertilizer for house plants, climbing vines, rose bushes, etc., ever placed on the market. Every particle of the food is taken up by the plant. Fed to the plants in proportion of one teaspoonful to a quart of water every two weeks, it keeps them growing and blossoming practically all the year around.

"Red Snapper" Plant Food is a dry flour made from the heads of the South American "Red Snapper." These fish are caught on the Campeche banks off the coast of Yucatan. The liberally large can at 50c each will last an ordinary family for a whole season. For those who wish to use it more extensively for outside use, we put it up in 12½ pound strong fibre sacks.

Prices

"Red Snapper" Plant Food in large cans, enough for 120 quarts solution, including 8 oz. Package of "Red Snapper" Plant Tonic, and 16 page Book of Instructions, 50c in U. S. 60c in Canada.

"Red Snapper" Plant Food, 12½ pounds in strong fibre sacks, with 2-pound package of Plant Tonic, in U. S. \$1.50; in Canada \$2.00.

"RED SNAPPER" PLANT SOAP

This season for the first time we are placing on the market an exceptionally pure grade of fish oil soap. It is sold under the trade name of "Red Snapper" Plant Soap. It is used as a bath for the flowers, and also used as a spray. When used as a bath, a small quantity is diluted with water in the shape of suds in a pail or tub, and if convenient, plants are dipped directly into the solution. Ferns and large plants that can not be handled in this way are sprayed with the solution, being careful that the under side of the leaves are thoroughly wetted. With proper dilution the fish oil soap with sulphur and nicotyl is entirely harmless to plants, but death to insects. As this soap combines the three well established and generally used essentials of insect killing elements, extract of tobacco or nicotyl, sulphur and fish oil soap, it saves the annoyance of keeping several kinds of insecticides on hand.

"Red Snapper" Plant Soap, "A bath for flowering plants" and a sure cure for the insect pests, 25c in U. S., 35c in Canada.

REEDS AND RAFFIA

NU-REED

Owing to war conditions we have been unable to secure any more of the natural reed and have been forced to substitute Nu-Reed, a reed that has proven, from reports of our natural reed customers, very satisfactory. Send for samples and sizes.

Size	Ft.	Price	Ft.	Wt.	Price
No. 1	25	\$0.05	120	4 oz.	\$0.25
No. 3	20	.05	100	4 oz.	.25
No. 4	15	.05	80	4 oz.	.25
No. 6	8	.05	40	4 oz.	.25
No. 7	13	.10	48	8 oz.	.45
No. 9	11	.10	45	8 oz.	.45
No. 11	9	.10	30	8 oz.	.50
Nos. 1 and 3,	480-400 ft.,	16 oz.			.90
Nos. 4 and 6,	320-144 ft.,	16 oz.			.85
Nos. 7, 9 and 11,	128-120-80 ft.,	16 oz.			.75
Raffia Needles,	6 for				

RAFFIA

Colored, per skein, 1 oz.	\$0.10
Colored, 1/4 lb.	.25
Colored, 1/2 lb.	.45
Natural, per skein, 1 oz.	.05
Natural, per lb.	.35
Natural, per 4 lbs	1.20
Book of Basket Making Instructions, postpaid	.25

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